Improving the Quality of Medical Care: A Critical Evaluation of the Major Proposals

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Nearly every major policy initiative in medical care relates to one of three major themes: cost, quality, or access. Some policy-makers emphasize runaway costs and seek new methods of restricting expenditures. Others focus on lack of access to medical care, especially for the uninsured. Another set of concerned individuals advocates methods for providing better quality medical care. Since these themes are not readily divisible, it is reasonable to pay some attention to quality in a symposium issue on costs and access.

The group concerned about the quality of medical care is a heterogeneous collection of professionals, reflecting the variety of approaches for ensuring quality. Traditionally, quality assurance was the responsibility of the medical staff of hospitals, and, in particular, of individual physicians. In the last fifteen years, however, hospital administrators have assumed wider prerogatives, and notions of institutional improvement now dominate the quality agenda.

Parallel to this internal quality assurance is the external oversight of state administrators. Their power to improve the quality of medical care remains largely confined to licensure control. A theoretically much more effective external quality control is tort law. Yet many—especially providers—have questioned tort law's deterrent effect and have suggested that defensive medicine, induced by fear of malpractice suits, unnecessarily increases the costs of medical care. Through tort reform they seek to hinder plaintiff's ability to sue. Many legislators at both state and federal levels have proven to be sympathetic to calls for limits on tort liability.

Controversy over the best way to improve quality has increased recently. While access issues dominated the health policy agenda over the last year, the optimal structure of quality assurance came in a very close second. In this

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essay, I critically review the various proposals for effecting better quality care and suggest that one—a system of no-fault compensation for medical injuries—is superior. In addition to ensuring better quality medical care, the no-fault system would provide more just compensation for medical injuries, and could be especially effective if integrated with a system of universal access to health care such as I have advocated elsewhere.  

I. DEFINITIONS AND MEASUREMENTS OF QUALITY

Examining proposals to improve quality is, in many ways, more difficult than examining access proposals, because “quality of medical care” is less well defined than “access.” Quality seems to comprise at least four different components: patient satisfaction, adherence to correct process, an acceptable outcome, and efficiency of care provided. Although it is possible that satisfied patients had good outcomes, and that adherence to correct process leads to efficient care, these concepts are nonetheless statistically and conceptually independent. Quality in the eyes of one person is not quality in the eyes of another.

Different definitions of quality give rise to distinct tools for measuring it. For instance, the federal government has attempted to measure quality by focusing on mortality rates among Medicare patients in individual hospitals, even though many have cautioned that differences in mortality rates among hospitals may be difficult to interpret (notwithstanding adjustments for clinical characteristics of the institution’s case mix). A wealth of other measures are


3. One would expect one quality measure to identify certain cases as quality problems, while another measure singles out a different set, because each is based on different definitions of quality. See Avedis Donabedian, The Epidemiology of Quality, 22 Inquiry 282, 282-83 (1985).


Improving the Quality of Medical Care

now in various stages of development. Unfortunately, there is little information on how the different measures overlap or correlate.

As noted, the most traditional definition of quality in medicine has been the prevention of untoward outcomes caused by medical care, so-called iatrogenic injuries. For the last forty years, physicians on tissue committees and participants at morbidity and mortality rounds have performed what a quality expert would refer to as “implicit judgments” about the standard of care expected of a reasonable practitioner.

Malpractice litigation has been built on the same foundation. The measure of quality in medical malpractice is compliance with a standard, coupled with the fact of injury. A successful litigant must show both negligence (failure to meet a standard) and compensable injury. Thus, in quality vernacular, malpractice is an outcome measure combined with an implicit judgment. This confluence of traditional medical and legal definitions of quality suggests that injuries

6. The RAND group has compared explicit process of care scales with implicit physician judgments in their analysis of quality of care before and after the institution of prospective payment. See Katherine L. Kahn et al., Measuring Quality of Care with Explicit Process Criteria Before and After Implementation of the DRG-Based Prospective Payment System, 264 JAMA 1969 (1990) [hereinafter Kahn, Measuring Quality]; Katherine L. Kahn et al., Comparing Outcomes of Care Before and After Implementation of the DRG-Based Prospective Payment System, 264 JAMA 1984 (1990). Others have used changes in severity of illness, employing Computerized Severity Index (CSI) and Medisgroups, to assess quality of care for myocardial infarction and coronary artery bypass grafting. See Lisa I. Iezzoni et al., The Utility of Severity of Illness Information in Assessing the Quality of Hospital Care: The Role of the Clinical Trajectory, 30 MED. CARE (forthcoming 1992). Another approach has been to assess patients’ judgments of the care they received as a measure of quality. See Paul D. Cleary et al., Patients Report About Their Hospital Care: A National Study (Jan. 3, 1990) (unpublished manuscript, on file with the Yale Law & Policy Review); Mark Meterko & Haya R. Rubin, Patient Judgments of Hospital Quality: A Taxonomy, 28 MED. CARE S10 (Supp. 1990). Still others have combined some outcome measures as indicators with implicit reviews to identify preventable adverse events. See Troyen A. Brennan et al., Incidence of Adverse Events and Negligence in Hospitalized Patients: Results of the Harvard Medical Practice Study I, 324 NEW ENG. J. MED. 370 (1991).

7. The perception that quality measures should be examined and compared is not new. Indeed, it has been twenty years since Robert Brook undertook what is still the broadest comparison of different methods of measuring quality. Robert H. Brook & Francis A. Appel, Quality-of-Care Assessment: Choosing a Method for Peer Review, 288 NEW ENG. J. MED. 1323 (1973). The opening paragraph of that paper reflects the background for and significance of this research effort: “Increasing public pressure and recent Congressional legislation have focused attention on the need for developing a formal mechanism . . . to assess the quality of medical care. The success of this effort, however, depends on the answers to two fundamental questions: whether information describing physician performance (process) or the results of care (outcome), or both, should be collected and analyzed; and how and by whom value judgments should be placed on these data to determine the quality of care provided.” Id. at 1323 (footnote omitted).

In that study, Brook evaluated process and outcome measures, based on both implicit and explicit reviews. Since then, the RAND group headed by Brook has ventured into multiple comparisons of quality measures. Specifically, they have used explicit and implicit measures of the process of care, and compared these to mortality rates, finding substantial concurrence in four prevalent diagnoses. See Kahn, Measuring Quality, supra note 6. Judith Hall has reported on the relationship between functional status and satisfaction. See Judith A. Hall et al., Older Patients Health Status and Satisfaction with Medical Care in an HMO Population, 28 MED. CARE 261 (1990).

These reports, however, are not designed to provide certain information that hospitals might find important as they select from the growing list of process and outcome variables. Cost data, for example, is not provided, and we still do not know how some major quality measures compare in terms of the kinds of cases they identify as poor quality, the overall preventability of the quality problems isolated, and the costs of implementation.
caused by failure to adhere to standard care form an important aspect of quality. Of course in some cases, especially those involving a failure to diagnose, the negligence judgment is not conceptually severable from that of causation. Nonetheless, the determination of negligence and the identification of causation by medical management are integral to the traditional notion of quality.

Recent data suggests that insofar as quality of medical care is defined as negligent injury, there is a great deal of room for improvement. I have worked with a team of investigators to evaluate a random sample of over 30,000 cases of medical care. We used conventional, health-services research methodology to estimate the number of adverse events, and the percentage of all adverse events, caused by negligent or substandard care in New York hospitals in 1984. We calculated that among the 2.6 million hospital discharges in New York in 1984, there were 89,200 adverse events. Of these, 56,000 gave rise to minimal impairment from which individuals recovered within one month, while another 13,500 led to moderate impairment but with recovery in less than six months. Therefore more than 70% of adverse events led to short-term disability. On the other hand, there were large numbers of individuals who suffered more serious injuries. Thirty-eight hundred adverse events produced permanent, partial impairment. More than 2,500 individuals incurred permanent total disabilities as a result of adverse events. Finally, 13,400 adverse events caused death. Overall, negligence caused 28% of adverse events. The proportion of negligent adverse events increased with severity of injury. Thus, there were nearly 7,000 deaths due to negligence.

These numbers are quite striking, particularly the fatality rate attributable

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8. Adverse events are defined as injuries prolonging the hospital stay, or causing disability at the time of discharge, that were caused by medical management as opposed to the disease process.

9. We also compared the results of our hospital record analysis to a comprehensive analysis of all litigation records from New York medical professional liability insurers, surveyed injured individuals as well as uninjured controls to understand the costs of injury suffered by patients, and used econometric methods to assess the deterrent effect of tort litigation. Much of this research has now been published in medical journals. See Troyen A. Brennan et al., Reliability and Validity of Judgments Concerning Adverse Events Suffered by Hospitalized Patients, 27 MED. CARE 1148 (1989) [hereinafter Brennan, Reliability and Validity]; Troyen A. Brennan et al., Identification of Adverse Events Occurring During Hospitalization: A Cross-Sectional Study of Litigation, Quality Assurance, and Medical Records at Two Teaching Hospitals, 112 ANNALS INTERNAL MED. 221 (1990); Troyen A. Brennan et al., Incidence of Adverse Events and Negligent Care in Hospitalized Patients, 324 NEW ENG. J. MED. 370 (1991) [hereinafter Brennan, Incidence of Adverse Events]; Lucian L. Leape et al., The Nature of Adverse Events in Hospitalized Patients, 324 NEW ENG. J. MED. 377 (1991); Troyen A. Brennan et al., Hospital Characteristics Associated with Adverse Events and Substandard Care, 265 JAMA 3265 (1991); A. Russell Localio et al., Relation Between Medical Malpractice Claims and Adverse Events Due to Negligence, 325 NEW ENG. J. MED. 245 (1991); Ann G. Lawthers et al., Physician Perceptions of the Risk of Being Sued, 17 J. HEALTH POL. POL’Y & L. (forthcoming 1992); William Johnson et al., The Economic Consequences of Medical Injuries: Implications for a No-Fault Insurance Plan, 267 JAMA (forthcoming May 1992). Much of this information is summarized in Troyen A. Brennan, An Empirical Analysis of Accidents and Accident Law: The Case of Medical Malpractice Law, 36 ST. LOUIS U. L.J. (forthcoming 1992) [hereinafter Brennan, Empirical Analysis of Accidents].
Improving the Quality of Medical Care
to negligence. Extrapolating the adverse event-related death total to the United States at large, we estimate there are 180,000 iatrogenic deaths annually. Over 90,000 of these are due to negligence. Moreover, the permanent total disabilities represent 3% of the overall, adverse-event total. This works out to approximately 35,000 permanently disabled individuals on a national basis. These cases represent enormous personal suffering as well as huge costs for social benefit programs. Thus, the burden of morbidity and mortality from poor quality medical care represents a significant public health problem.

In summary, the measure of injuries caused by substandard care indicates that poor quality care pervades our current system. This degree of substandard care compels an examination of proposals for improving the quality of care. While doing so, we should not forget the other important parameters in the health policy debate: cost containment, justice, and access.

II. EXISTING METHODS FOR ASSESSING QUALITY

The foregoing discussion provides us with a lens for studying proposals to improve medical care and for judging the overall "fit" of these proposals with universal access. Before doing so, this section will review contemporary quality-assurance practices. Current methods of ensuring and improving the quality of care can be placed in one of three categories: provider initiatives, regulation, and tort law.¹⁰

Providers still undertake their own forms of self-policing to ensure high-quality care for patients. Foremost among these are ethical standards calling for altruistic attention to the patient's medical needs. Part of this attention consists of ongoing commitment to high-quality medical care.¹¹ Indeed, most physicians would submit that it is their own sense of ethics, rather than some set of outside influences, that provides the primary motivation for maintaining a high standard of care.¹²

More formal quality assurance efforts have been assumed by hospitals and their medical staffs.¹³ For example, hospitals have had strict controls on

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¹⁰. Here we leave aside the possibility that a market in health care would bring about competition based on quality. See infra part VI.


¹². When thinking about quality, most providers chiefly consider medical injury prevention, although ratings of patient satisfaction also play a role.

¹³. Quality assurance, including assessment of iatrogenic injuries, has been a primary duty of medical staffs since the structure of modern hospitals developed in the early part of this century. First the Hospital Standardization Program of the American College of Surgeons, and then the Joint Commission for Accreditation of Hospitals, insisted that medical staffs review records and ensure that a high standard of care was rendered. Timothy S. Jost, The Joint Commission on Accreditation of Hospitals: Private Regulation of Health Care and the Public Interest, 24 B.C. L. REV. 835, 847 (1983).
record-keeping for a long time. In conjunction with the medical staff, hospitals have maintained tissue committees and morbidity/mortality conferences where physicians have been able to engage in self-criticism. The medical staff promotes quality care by policing itself through credentialing committees that control membership. We know little about the efficacy of such programs, although there is some evidence that hospitals that support such committees have fewer malpractice claims, and presumably cause fewer medical injuries.

As noted above, interest in quality assurance and improvement in health care has re-emerged, leading to the development of several new quality tools. The reasons for this renewed effort are not entirely clear, but it may be motivated by a perception on the part of health-care organizations that they will one day have to compete on the basis of the quality of care they render. New philosophies of quality improvement also have developed, many centering on industrial models of quality enhancement. This Total Quality Management (TQM) movement emphasizes an understanding of the hospital as a complex institution critical to improving care. It appeals largely to hospital administrators and has offered little to the individual practicing physician. Those organizations that most successfully have employed TQM are integrated health-care management organizations, in which a central authority exercises control over the entire range of health-care institutions, from doctors’ offices to hospitals, and to long term care. Nonetheless, TQM is in its infancy, and as yet there are no studies of its efficacy.

Since the provider-initiated forms of quality assurance offer so little opportunity for consumer appraisal, it is not surprising that most of the attention of lawyers and policymakers focuses on regulation and torts. Regulation

14. For an excellent sociological analysis of the imperial world of quality assurance on a surgical staff, see Charles L. Bosk, Forgive and Remember (1979). Again, the emphasis is on prevention of medical injury.
17. Building on insights developed in quality improvement by large organizations, some physicians have argued that the best way to bring about better care in hospitals is to shift the focus of quality assurance efforts from physician mistakes to system failures. See Donald M. Berwick, Continuous Improvement as an Ideal in Health Care, 320 New Eng. J. Med. 53 (1989); Glenn Laffel & David Blumenthal, The Case for Using Industrial Quality Management Science in Health Care Organizations, 262 JAMA 2869 (1989).
18. For instance, much of the intellectual activity regarding total quality management has been generated at the Harvard Community Health Plan, in particular by Don Berwick. The Harvard Community Health Plan is an integrated staff model health maintenance organization. All physicians and nurse practitioners are full-time employees. The various health centers refer all their patients to a single hospital.
19. Patient inability to judge the quality of sophisticated medical care has led to the distinction between technical quality and functional quality, the latter being the set of parameters that the patients relies upon when assessing care. See Emin Babakus & W. Glynn Mangold, Adapting the SERVQUAL Scale to Hospital Services: An Empirical Investigation, 26 Health Services Res. 767 (1992).
Improving the Quality of Medical Care

itself is rather underdeveloped. The earliest form, the Joint Commission on Accreditation of Hospitals (JCAH), was actually an outgrowth of provider self-regulation. While states historically have licensed practitioners, only recently have concerns about quality become part of the licensing procedure. Since about 1975, states have tried to exercise more thorough review of hospital care, but recently these efforts have been hampered by yawning budget deficits.

The federal government slowly has come to exercise some oversight of medical care under the federal reimbursement programs, especially Medicare. First under the Professional Standard Review Organizations and now through the Peer Review Organizations (PROs), the Health Care Financing Administration is supposed to identify substandard care provided to beneficiaries. Unfortunately, some PROs have been badly administered and their evaluations of care shown to correlate very poorly with more accepted approaches.

Given these alternatives, it should be clear why tort law casts a long shadow in medical care. The successful litigant sends one of the few signals heard by practitioners regarding the quality of care. Under a general theory of deterrence, the successful plaintiff's economic award should reduce health-care providers' accident-causing behavior in the future. While the

20. See Jost, supra note 13, at 847-52. It is notable that there is little correlation between the quality of measures completed by the JCAH and other measures of quality. See Helen R. Burstin et al., Correlations Between Different Measures of Hospital Quality, 40 CLINICAL RES. 578A (1992) (abstract).
21. See Kansas State Bd. of Healing Arts v. Foote, 436 P.2d 828, 834 (Kan. 1968) (finding that physician competence should be an issue in licensing).
22. For instance in 1986, Massachusetts passed sweeping legislation requiring hospitals to report cases of physician discipline. Hospitals' challenges to this legislation were largely unsuccessful. See, e.g., Beth Israel Hosp. Ass'n v. Board of Registration, 515 N.E.2d 574 (Mass. 1987).
23. Public Citizen, a health advocacy group in Washington, has monitored the number of disciplinary proceedings undertaken by licensing authorities in all fifty states over the past decade. In 1983 state licensing boards reported only 563 serious disciplinary actions taken against physicians in the United States, amounting to an average of 1.5 disciplinary actions per 1,000 physicians. See SIDNEY WOLFE ET AL., PUBLIC CITIZEN, MEDICAL MALPRACTICE: THE NEED FOR DISCIPLINARY REFORM, NOT TORT REFORM 1 (1985). While there were increases in the number of proceedings in a variety of states in the mid 1980s, overall it appears that the numbers are now slipping. Experts believe that this is due to lack of funding for state regulators. Telephone Interview with Sidney Wolfe, Director, Public Citizen Research Group (Jan. 12, 1992). See also Richard Saltus, Doctor-review Panel is 46th in US Ranking, BOSTON GLOBE, Apr. 23, 1992, at 29.
24. One of the legislative compromises that gave rise to Medicare was the result of an American Medical Association demand that Medicare not be granted broad oversight responsibilities. See David Blumenthal, Medicare: The Beginnings, in RENEWING THE PROMISE: MEDICARE AND ITS REFORM 3, 8 (David Blumenthal et al. eds., 1988).
25. Clark C. Havighurst & James F. Blumstein, Coping with Quality/Cost Trade-offs in Medical Care: The Role of PSROs, 70 NW. U. L. REV. 6, 8 (1975).
26. For example, the Health Care Financing Administration just cancelled its contract with the major Peer Review Organization in Florida. See Feds End Contract with Florida PRO, AM. MED. NEWS, Jan. 15, 1992, at 1.
economic aspect of the signal is greatly muted by the flat nature of professional liability insurance, some argue that malpractice litigation generates enough psychological deterrence to produce a change in physician behavior.

Our group of investigators recently has subjected the deterrence theory of malpractice litigation to a relatively rigorous empirical assessment. We found that, while large numbers of medical injuries occur in American hospitals, surprisingly few of these give rise to litigation. In fact, there are approximately seven to eight times as many injuries as claims for medical injuries. In addition, many claims arise in cases where there is no medical injury. We concluded that as few as 2% of negligent medical injuries give rise to litigation, while as many as 80% of claims arise in cases in which no injury or negligence exists.

This information suggests that confidence in tort litigation as a method of improving quality is misplaced. Indeed, it is difficult to detect a deterrent effect associated with the haphazard functioning of malpractice litigation. While survey data suggests that physicians believe they are at a substantial risk of being sued, the safety induced by higher rates of litigation cannot be ascertained. We performed econometric analyses comparing litigation rates and injury rates between regions in New York, hoping to uncover some evidence of the deterrent effect of litigation. We could not find evidence that supported our hypothesis that there should be fewer injuries in areas where there was more tort litigation. Therefore, tort law's role as a quality-inducing device is somewhat suspect.

Given the incidence of medical injuries noted above, the currently available means of inducing quality in medical care must be ineffective. No doubt this can be at least partially explained by our general societal acceptance of the medical profession's request that we trust them to provide decent care. Another explanation may be that government and consumers lack the will to overcome a powerful profession's assertion of self-regulation. In any case, as we prepare to remake the financing of American health care (in part, it is presumed, to provide high quality care to all Americans, not just those with

30. See Peter A. Bell, Legislative Intrusions into the Common Law of Medical Malpractice: Thoughts About the Deterrent Effect of Tort Liability, 35 SYRACUSE L. REV. 939, 966 (1984).
32. Lawthers et al., supra note 9.
34. I have said little about the tort compensation function. I will return to this subject later in the essay. See infra text accompanying notes 67-70.
35. See BRENNAN, supra note 2, at 97-120.
Improving the Quality of Medical Care

insurance), we should carefully study the available proposals for bringing about better quality medical care.36

As the foregoing would suggest, relatively few generic alternatives for improving the quality of care exist. We could remind doctors and other providers of their ethical duties to provide optimal care for patients.37 Another approach would be to bolster regulatory oversight both at the state and federal level.38 By and large, however, reform proposals tend to emphasize changes in tort law as the best means for improving the quality of care. These should be explored in more detail.

III. TRADITIONAL TORT REFORM

Tort reform generally refers to changes in tort doctrine that have been undertaken by legislators. These changes are meant to correct the "mistakes" of common law courts. In reality, tort reform almost always modifies tort law so that plaintiffs are less likely to sue, and is undertaken at the behest of chronic defendants, especially physicians concerned about malpractice litigation and manufacturers upset by product liability. Such reform is especially stringent during periods when claims rates appear to be increasing at unparalleled


37. BRENNAN, supra note 2, at 121-46.

38. Several of the bills currently being considered by Congress would attempt to increase patient protection through disciplinary reforms. For instance, under S. 489, in order to receive Public Health Service Act funds states would be required to certify that risk management programs had been established and that they had significant ongoing peer review. Similar oversight would be required under S. 1123/H.R. 3037. Specifically, state health authorities would be required to collect data both on disciplinary actions and on the use of continuing medical education. Under S. 1836, to receive enhanced Medicaid bonus payments, states would be required to gather data on health-care injury prevention programs. Again, states would be required to assure that fees paid by professionals seeking licenses were designated for use by the agency undertaking disciplinary action in a particular state. See AMA REFORM SUMMARY, supra note 36, at 34.
rates, such as in the malpractice crisis of the mid-1970s and the general tort crisis of the mid-1980s.  

Increased claims rates are generally laid at the foot of judges, who are said to have increased tort litigation inappropriately by lifting doctrinal burdens from plaintiffs, and in many cases, shifting them to defendants. In medical malpractice litigation, changes in the locality rule, use of the doctrine of res ipsa loquitur, the move from battery to negligence in informed consent, the loss of the charitable immunity defense, and the use of notions of corporate liability have all been cited as reasons for the increasing success of injured patients' suits over the last twenty years.

Tort reform, then, merely re-levels the playing field to protect defendants. There are two generic approaches. Both tend to apply pressure on the most sensitive area of the tort process: the checkbook of the plaintiff's attorney. By making it more costly to bring suits, and by diminishing the payoff, the plaintiff's attorney must set a higher threshold for bringing a case. The result is that fewer suits are filed.

The first generic approach makes the path to trial longer, or blocks it altogether. Shortened statutes of limitations, the use of screening panels

39. The notion of tort crises and the need for tort reform has been carefully analyzed by George Priest. Priest argues persuasively that judges, following the advice of academics, have tried to re-knit the tattered social welfare safety net by creating third-party insurance through torts. Changes in strict liability, and concepts of enterprise liability, have been the major vehicles for this increase in tort awards. See generally George L. Priest, Understanding the Liability Crisis, in NEW DIRECTIONS IN LIABILITY LAW, at 196 (Proceedings of the Academy of Political Science Vol. 37, No. 1, 1988). See also George L. Priest, The Invention of Enterprise Liability: A Critical History of the Intellectual Foundations of Modern Tort Law, 14 J. LEGAL STUD. 461 (1985).

40. Here I follow arguments previously outlined in Paul Weiler & Troyen A. Brennan, Medical Malpractice, in U.S. BIPARTISAN COMM'N ON COMPREHENSIVE HEALTH CARE (PEPPER COMM'N), A CALL FOR ACTION: FINAL REPORT OF THE PEPPER COMMISSION 43 (Supp. 1990), and in PAUL C. WEILER, MEDICAL MALPRACTICE ON TRIAL (1991).

41. See, e.g., Brune v. Belinkoff, 235 N.E.2d 793 (Mass. 1968) (reviewing history of locality rule and holding that doctors should be judged by their compliance to nationwide standards, not local standards).

42. See, e.g., Ybarra v. Spangard, 154 P.2d 687 (Cal. 1944) (holding that res ipsa loquitur applies when an accident ordinarily does not occur in absence of negligence and is caused by something within exclusive control of defendant); Quintal v. Laurel Grove Hosp., 397 P.2d 161 (Cal. 1964) (combining res ipsa loquitur with expert testimony).

43. See, e.g., BRENNAN, supra note 2, at 100-11.

44. See, e.g., Bing v. Thunig, 143 N.E.2d 3 (N.Y. 1957) (eliminating charitable immunity for New York hospitals when patients are injured by hospital employees acting within scope of their employment).

45. See Insinga v. LaBella, 543 So. 2d 209 (Fla. 1989) (holding that corporate negligence doctrine imposes duty on hospitals to select and retain competent physicians, even if they are independent practitioners).

46. See WEILER & BRENNAN, supra note 40, at 48.

47. A more direct approach is to restore the doctrines that were previously in place. See, e.g., WEILER, supra note 40, at 30 (describing efforts to limit doctrine of res ipsa loquitur and to reinstate locality rule).

Improving the Quality of Medical Care

composed of providers and others, and modifications of attorney fees all accomplish this end. The second method limits damages available to successful plaintiffs. Instead of paying lump sums, which provide a quick payoff for plaintiffs' attorneys, legislators increasingly require periodic payments of damages. Some legislatures have overturned the collateral source rule and now require mandatory offsets. Finally, many states limit noneconomic damages, and a few restrict economic damages as well. These tort reform methods have been studied carefully; it is clear that limiting access to the courts decreases the claims rates, and that changes in damage rules decrease claims rates significantly.

The Congressional sponsors of tort-reform legislation have paid attention to the empirical studies. They typically have endorsed periodic payment for future damage awards greater than $100,000; mandatory collateral source offsets; caps on noneconomic damages of greater than $250,000; limits on contingent attorney fees; and restrictions on statutes of limitations. They also support several liability in place of joint and several. States

50. See, e.g., Roger C. Henderson, Designing a Responsible Periodic Payment System for Tort Awards: Arizona Enacts a Prototype, 32 ARIZ. L. REV. 21, 27 (1990). Plaintiff's attorneys often try to avoid periodic payment by indicating in settlement discussions that the use of periodic payment will result in long-term liens against the estate of physicians.
53. See Frank Sloan et al., Effects of Tort Reforms on the Value of Closed Medical Malpractice Claims: A Microanalysis, 14 J. HEALTH POL'Y, POL'Y & L. 663 (1989); see also Weiler, supra note 40, at 34-36.
54. S. 489, H.R. 1004, S. 1123, H.R. 3037, S. 1836, H.R. 3516, H.R. 3410 and S. 1936 all require periodic payment for awards for future losses or expenses of greater than $100,000. See AMA REFORM SUMMARY, supra note 36, at 21-22.
57. Limits on contingent attorney fees are more variable. S. 489 and H.R. 1004 allow 33% as a contingent fee on the first $100,000, 15% on the second $100,000 and 10% thereafter. S.1836 allows only a 25% contingent fee on the first $150,000 and 15% on all awards thereafter. H.R. 3410 allows 40% contingent fee for the first $500,000, 33% contingent fee on the next $50,000, 25% on the next $100,000 and 10% thereafter. S. 1936 follows the same approach as S. 1836: 25% for the first $150,000 and 15% thereafter. Id. at 27-28.
58. The restrictions on statutes of limitations also vary somewhat. Most of the bills provide for a two-year statute of limitations with a four-year statute of repose. A statute of repose restricts use of the discovery rule to four years. For children, the bills make an exception to the four-year statute of repose, but require that any actions be brought before the child is eight, or otherwise conform with the statute requirements. H.R. 3516, on the other hand, requires a two-year statute of limitation with no statute of repose. H.R. 3410 rules out any use of a discovery rule and provides that, in cases involving children, the relevant statute of limitations begins running when the child turns six years old. Id. at 29-31.
59. All of these reform measures require that the joint and several liability proportionately be converted to several liability so that litigants are only liable for the proportional fault they cause. Id. at 31-32.
undertaking such reforms can expect certain federal supports that noncompliant states will have to forego.  

The Bush administration and Republican Congressional commitment to tort reform is impressive. It suggests that they perceive the major health problem in this country to be the disturbances induced by malpractice litigation. In particular, they cite the enormous costs of defensive medicine and the lack of access—especially to obstetrics services in low-income areas—induced by providers' fear of litigation. These disturbances of the tort system, however, are poorly documented and hardly withstand serious scrutiny as the major ailments of the health-care delivery system.

Estimates of the costs of defensive medicine vary widely, largely because "defensive medicine" itself is hard to define. Providers attest that defensive medicine occurs and is debilitating. Providers loath tort litigation, however, and therefore one must discount their responses (the more expensive they make defensive medicine sound, the more pressure there is for tort reform). Since it is nearly impossible to distinguish appropriately conservative care from defensive medicine, and because many purportedly defensive practices are nonetheless lucrative for providers, a careful study of the issue is extremely difficult. Any estimates, then, especially those influenced by someone's political agenda, must be viewed with suspicion.

The argument that access problems result from malpractice litigation is even less convincing. It has long been suggested that poor patients sue more often than others, and that many practitioners, particularly obstetricians, are driven out of impoverished areas by frequent suits. The available empirical evidence refutes these propositions. It is now clear that Medicaid recipients, for instance, sue no more frequently than other patients. More importantly,
Improving the Quality of Medical Care

recent research clearly demonstrates that poor patients are less likely than other patients to bring suit.\(^67\)

Other empirical evidence, alluded to above, further undermines the federal push to tort reform. Research from New York suggests that fewer than 2% of negligently injured individuals file claims.\(^68\) This means that a substantial burden of injury costs are borne by people who theoretically could bring claims. Tort reform will only increase the number of uncompensated victims. More importantly, the same research provides the basis for estimates that negligence causes 100,000 deaths and 15,000 permanent, total disabilities in American hospitals each year.\(^69\) In light of these statistics, tort reform cannot be considered a responsible reform option, unless one is willing to discount completely the deterrent effect of malpractice litigation.\(^70\) Such reform certainly has little in common with the communitarian sentiments that underlie the recent urge to provide universal coverage.

Proponents of traditional tort reform could base their argument on a cost-containment rationale. If claims rates drop, then malpractice premiums should decrease and, accordingly, the rise in medical costs will moderate. Unfortunately, this can have only a small effect on cost containment because malpractice expenditures constitute only 1-2% of total health-care costs.\(^71\) Moreover, while premiums have leveled off, and even decreased, over the past three years, health-care inflation continues unabated.\(^72\)

On the other hand, a public choice model may explain much of the tort reform legislation. Insofar as it promises decreased health-care costs, by supposedly lowering the incidence of defensive medicine, tort reform may appeal to third-party payers. Since it will reduce the number of suits, it appeals greatly to providers, especially physicians and their insurers. Malpractice reform may also shift attention from payer reform, a strategy that the Bush Administration may espouse as it calculates the costs of universal coverage. Thus, while tort reform can only decrease the quality of care (so long as there is any deterrent effect associated with litigation) and certainly leaves many individuals uncompensated for the costs of negligent injury, it may nonetheless be politically viable.

\(^{67}\) Helen R. Burstin et al., Malpractice Claims and Socioeconomic Status: A Case Control Study, 40 CLINICAL RES. 578A (1992) (abstract). A more reasonable argument to explain problems with access for poor pregnant women is that reimbursement rates under Medicaid are viewed by many physicians as insufficient.

\(^{68}\) See Localio et al., supra note 9, at 247-48.

\(^{69}\) See Brennan, Incidence of Adverse Events, supra note 9.

\(^{70}\) While our measurements have failed to detect a significant effect of tort litigation, it seems unwise to limit its possible deterrent effects without some replacement. Traditional tort reform could only reduce the deterrent effect of malpractice litigation.

\(^{71}\) See WEILER, supra note 40, at 4.

IV. DISPUTE RESOLUTION

In addition to supporting traditional tort reform, many Congressional proposals advance alternative dispute resolution (ADR) techniques for disposing of injury claims by patients. 73 Advocates of ADR are motivated primarily by the extensive administrative costs of malpractice litigation. 74 They reason that an approach based on arbitration or other forms of negotiation would be more efficient. 75 ADR could also increase access to legal services, as lower administrative costs translate into lower contingency fees and perhaps lower thresholds for taking cases. 76 In addition, ADR techniques are thought to promise more expeditious determinations for damages 77 and perhaps more equitable and predictable decisions. 78 While there is little empirical evidence supporting ADR, 79 there nonetheless is momentum in favor of at least some dispute resolution devices. 80

The term alternative dispute resolution encompasses a large number of devices for settling claims. 81 In the malpractice field, however, commentators

73. For example S. 489 and H.R. 1004 call for experimentation with alternative dispute resolution (ADR) systems, either voluntary or mandatory. S. 1123 and H.R. 3037 encourage the adoption of alternative dispute resolution mechanisms. In order to receive all of their Medicare/Medicaid funds, states will have to establish at least one ADR mechanism that is approved by the Secretary of Health and Human Services. H.R. 3516, H.R. 3410, and S. 1936 have less specific requirements regarding promotion of ADR. See AMA REFORM SUMMARY, supra note 36, at 5-6.


76. See Clark Havighurst & Thomas Metzloff, S. 1222—A Late Entry in the Race for Malpractice Reform, 54 LAW & CONTEMP. PROBS., Spring 1991, at 179, 185-86.

77. Meschievitz, supra note 75, at 196-197.


80. The momentum is evidenced by the proposed federal legislation encouraging ADR and the arguments of commentators like Havighurst and Metzloff. See Havighurst & Metzloff, supra note 76.

81. Experts in mediation and negotiation relate that the key to overcoming potential disputes is to emphasize mutual interests and minimize the importance of rights. They restructure disputes and demonstrate to the parties that concerted effort rather than conflict is the best means for reaching goals. For instance, ADR techniques have helped overcome crippling labor strife in coal mines by showing both workers and mine operators that decentralization, cooperation in decision-making, and greater flexibility in work patterns are advantageous to both sides. WILLIAM L. URY ET AL., GETTING DISPUTES RESOLVED 101-33 (1988).
Improving the Quality of Medical Care

generally mean arbitration or mediation when they refer to ADR. There have been a large number of experiments with both arbitration and mediation in medical malpractice disputes. For example, since 1965 Michigan has had a voluntary and binding arbitration program for all claims concerning medical injury. The program passed constitutional challenge and has been considered a prototype for arbitration. Maryland also has offered mandatory, but non-binding, arbitration. Wisconsin created a mandatory mediation panel system in 1986.

Unfortunately, any impact these programs generated seems largely negative. For instance, in Michigan only 800 of 20,000 claims have been arbitrated. In Maryland, more than half of the arbitrated cases eventually culminate in litigation. And in Wisconsin, the mediation process is perceived as generally inhibiting negotiation.

One could argue that the practical problems associated with ADR are the fault of professionals, especially lawyers, who have little to gain, and therefore introduce more formal litigation procedures and techniques into the ADR proceedings. They also recommend that clients forgo ADR, and emphasize civil litigation. The remedy for such disruption is to force malpractice disputes out of courts and into alternative fora through binding or mandatory ADR. Of course many—judges in particular—oppose mandatory ADR; indeed courts

82. Ury and colleagues define mediation as "negotiation assisted by a third party." Id. at 49. The mediation generally involves either a peer or an expert as the mediator. On the other hand, arbitration is referred to as private adjudication. In arbitration as in the court room, the parties continue to present evidence to a third party. Id. at 56. A hybrid between mediation and arbitration is referred to as med-arb in which the mediator can become the arbitrator if the mediation does not succeed. Id. at 56-57.

Pre-trial screening panels are also classified as a form of alternative dispute resolution. These have been widely criticized as costly and inefficient. See Martin H. Redish, Legislative Response to the Medical Malpractice Insurance Crisis: Constitutional Challenges, 55 TEX. L. REV. 759, 766-68 (1977); James A. Henderson, Agreements Changing the Forum for Resolving Malpractice Claims, 49 LAW & CONTEMP. PROBS., Spring 1986, at 243, 249. Nonetheless there are still advocates. E.g., Jean A. Macchiaroli, Medical Malpractice Screening Panels: Proposed Model Legislation to Cure Judicial Ills, 58 GEO. WASH. L. REV. 181, 187 (1990); see also Debra L. Fortenberry, Note, Screening Panels: Corrective Surgery or Amputation?, 4 OHIO ST. J. ON DISP. RESOL. 255, 257 (1989); Shmanske & Stevens, supra note 49.


84. See Morris v. Metriyakool, 344 N.W.2d 736, 755 (Mich. 1984). This was not true for mandatory, non-binding arbitration in Pennsylvania; the Pennsylvania Supreme Court declared the arbitration panels to be unconstitutional delays of the right to a speedy jury trial. See Mattos v. Thompson, 421 A.2d 190, 195 (Penn. 1980). See also Stuart A. Law, Comment, After Mattos v. Thompson—The Future of Pennsylvania's Health Services Malpractice Act, 86 DICK. L. REV. 313 (1981).


86. See Meschievitz, supra note 75, at 201-05.

87. See U.S. GEN. ACCOUNTING OFFICE, supra note 83, at 3-10.

88. See MacAllister & Scanlon, supra note 85, at 501-03.

89. See Meschievitz, supra note 75, at 210-14.
have found mandatory, binding agreements to be unconstitutional. While wholesale efforts to endorse ADR techniques would increase their use, courts generally fear that patients could not understand the nature and magnitude of the rights they would be forfeiting in ex ante agreements.

The alternative dispute resolution proposals appear rather neutral from other perspectives for judging health policy reform. They may contain costs by decreasing administrative costs associated with litigation, but as we have seen, this effect is likely to be small so long as ADR remains underutilized. ADR neither alters access to medical care, nor logically complements a universal access financing proposal. Nor is ADR definitively more just than tort reform: it does not offer any grounds for more appropriately compensating those injured by medical accidents.

V. RADICAL DISPUTE RESOLUTION AND MULTIPLE STANDARDS OF CARE

Not to be dissuaded by judicial hesitance, or by states' unsuccessful experiences with nonbinding or voluntary systems, Senator Domenici has now submitted S. 1232, entitled "The Medical Injury Compensation Fairness Act of 1991." This bill would require any malpractice cases arising from federally subsidized care to go into the alternative dispute resolution systems. Senate Bill 1232 goes well beyond encouraging ADR and attempts to replace tort law's inflexible emphasis on a single standard of care with a contractual relationship between doctors and patients that would specify both the dispute resolution forum and the standard of care that the patient had decided to purchase. The defining paradigm is not a single standard expected of the reasonable medical practitioner defined by physicians, but rather the purchase

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90. The most frequently cited cases on courts' reactions to mandatory, binding arbitration are *Tunkl v. Regents of Univ. of Cal.*, 383 P.2d 441 (Cal. 1963) and *Emery Univ. v. Porubiansky*, 282 S.E.2d. 903 (Ga. 1981).

91. See WEILER, supra note 40, at 94-95.

92. See Havighurst & Metzloff, supra note 76, at 179-83. S. 1232 creates three categories of patients and providers: those whose care is paid for directly by the federal government; those whose health insurance is a tax deductible business expense for an employer; and all others. Id. at 181. Anyone who falls into the first two categories is assumed to have agreed to participate in dispute resolution programs. In effect, then, ADR is binding and mandatory. All dispute resolution services must be certified by the Secretary of Health and Human Services. The bill endorses the same sorts of limits on recoveries as other federal bills, but notably does not specify the nature of the dispute resolution mechanisms to be employed. Rather it appears to create a market place of different alternative dispute resolution techniques with competition eventually leading to an appropriate mix of approaches.

As such, S. 1232 represents the most practical effort to effectuate theories of contractual relationships that have long been advocated by Epstein and Havighurst. See Richard A. Epstein, *Medical Malpractice, Imperfect Information, and the Contractual Foundation for Medical Services*, 49 LAW & CONTEMP. PROBS., Spring 1986, at 201; Clark C. Havighurst, *Altering the Applicable Standard of Care*, 49 LAW & CONTEMP. PROBS., Spring 1986, at 265; Clark C. Havighurst, *The Professional Paradigm of Medical Care: Obstacle to Decentralization*, 30 JURIMETRICS J. 415 (1990).
Improving the Quality of Medical Care

of a particular standard by a well-informed consumer who also decides how any disputes regarding failure to reach that standard are to be resolved. Senate Bill 1232 does not just endorse arbitration; it presents an alternative method for bringing about quality that deserves more thorough investigation.

The goal of S. 1232 is to create a market in health-care delivery that features not only differently priced products (a result that is slowly being accomplished by the competition between traditional insurance and managed care options), but also products of various quality. Instead of the single standard expected of the reasonable medical practitioner, the bill envisions individual consumers, as well as benefits managers, selecting the level of care they desire and purchasing an appropriate plan. Just as some people purchase very safe Volvos, some people would purchase the reasonable standard of care. Others buy Volkswagens, preferring lower price to safety; the same might be true of some health-care purchasers.93

If there is merit in the multiple standard approach, its supporters must be prepared to move away from theoretical formulations and describe a new health-care market in detail. Specifically, they must address the process questions that will arise.94 Two such questions seem paramount. One involves the specification of the product, and the other concerns the distinction between provider competence and choice of treatment.

First, it is difficult to envision how a real market might develop a comprehensive set of health-care standards. Advocates appear to intend every type of disorder to have a hierarchy of therapies, each of which would have to be specified in some detail. Developing such standards would be a mind-boggling task.95 The specifications of therapy alternatives would also have to address

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93. Perhaps the most interesting thing about the idea of multiple standards of care is that it is offered as a response to our current crisis of un- and underinsurance. John Siliciano has provided the best theoretical justification for multiple standards. See John A. Siliciano, Wealth, Equity, and the Unitary Medical Malpractice Standard, 77 VA. L. REV. 439 (1991). He bases his attack on the unitary medical standard by pointing out the inconsistency of having multiple standards in product liability law and a single standard in health care. But his major rationale for development of diverse quality products in medical care is a concern for those who lack access. The unitary standard, he reasons, has caused medical care to be so expensive that many are simply priced out of the market. The humane thing to do is not to market only Volvos, and leave some people without transportation, but rather to market some VW's for the less affluent. I discuss this argument in more detail elsewhere. See Troyen A. Brennan, Why Increase Access to Medical Care?, 29 Hous. L. REV. (forthcoming 1992).

94. Siliciano, for example, recognizes that process concerns, regarding the functioning of a liability rule within the process of litigation, can justify certain rules that lack instrumental value. Siliciano, supra note 93, at 473. In particular, he allows that the duty to rescue rule is justified as a result of process constraints. For a discussion of process constraints in torts law, see James A. Henderson, Process Constraints in Torts, 67 CORNELL L. REV. 901 (1982); see also James A. Henderson, Judicial Review of Manufacturers Conscious Design Choices. Limits of the Adjudication, 73 COLUM. L. REV. 531 (1973).

This segment of Siliciano's argument is critical. If he cannot overcome concerns about the process role of the unitary standard, there is no need to debate the more complicated, and perhaps, more important instrumental issues that support the unitary standard.

95. Presumably, these contracts would have to contain a great deal more detail on treatment options than are presently available in practice guidelines. See infra text accompanying notes 99-104.
the nuances in the presentations of the disease. For example, no two cases of head trauma are alike, making rigid protocols difficult to apply. Consumers could take advantage of any grey areas not clearly addressed by the protocol to argue the standard was not met. Thus, although specification is critical, it is difficult to attain.

Second, a provider's competence is not readily differentiated from the selection of procedures: a competent doctor selects the correct therapy. If competence itself is judged with a unitary standard, then why would a provider take a chance on not employing more sophisticated therapy for a given case? Suppose, for example, that the health-care product could be so carefully specified that providers knew that skull injuries involving only brief loss of consciousness were not to receive CT scans, but that those with injuries causing prolonged loss of consciousness or neurological deficit were to go to CT scan. If the CT scan were not done, and the patient were to die of a subdural hematoma that would have been diagnosed if the test were completed, then the estate of the patient might claim that the physician was incompetent for failing to realize the loss of consciousness was prolonged, or for failing to diagnose the neurological defect. The signal doctors would then receive would be to ignore the empirical evidence of appropriate diagnostic interventions. The unitary standard for competence would frustrate the goal of multiple standards for allocation. It would be in the provider's interest simply to perform the test.

Even if specification were accomplished and physician behavior controlled, courts would find it difficult to enforce the various standards. We have shown that questions of negligence are extraordinarily complicated and account for a large proportion of the administrative costs associated with litigation. With multiple standards, the complexity of negligence determinations could only increase, as would their cost. Plaintiffs' attorneys might find sufficient confusion in cases where the standard is lower than the traditional "reasonable practitioner" standard, and sufficiently high administrative costs, that it would not be worthwhile to represent such cases. Since the "less than standard care"


97. See Brennan, Reliability and Validity, supra note 9. This study shows that determinations of causation, where medical management as opposed to the disease process caused an injury, are relatively uncomplicated. If one reviewer finds causation, then it is likely the next reviewer will. On the other hand, negligence determinations lack this sort of inter-rater reliability. There are many cases in which physicians disagree diametrically on the negligence standard. Hence, the judgments themselves must be regarded as more complicated, and requiring higher costs to accomplish.
Improving the Quality of Medical Care

cases would be more costly to represent, as a result of the unfamiliar standard, and the economic damages would presumably be lower, we might find greater diminution in the already diminished ability of lower-income patients to press malpractice claims.98

Clark Havighurst recognizes these process concerns about multiple standards, but thinks that he may have found the solution: practice guidelines.99 Practice guidelines are standardized specifications for care, either for using procedures or for managing a particular clinical problem.100 Congress has instructed the Agency for Health Care Policy and Research to develop guidelines, and this work is being undertaken by a variety of Patient Outcome Research Teams (PORT's). A number of private organizations have already developed guidelines.

Havighurst believes guidelines could overcome the type of process concerns noted above. As others have argued,101 practice guidelines could improve the tort process by providing independent and impartial exculpatory or inculpatory evidence about the standard of care. The guidelines, then, would increase the validity and reliability of negligence determinations. The litigation process would improve because the determination of fault would become less complex if there were reference guidelines. The administrative costs would also decrease.

The same could be true for torts in a multiple-standard world. Presumably, practice guidelines could be developed for each of the various standards for a given condition. Hence, there would be not only a “usual practice” standard for coronary artery disease and use of angiography, but also a “far-below-usual” practice standard, and a “moderately-below-usual” practice standard. The algorithms, then, would solve the process problems faced by courts and attorneys as they confront the welter of levels of care.

Havighurst also draws the use of guidelines back into the ADR movement. He envisions use of practice parameters and multiple standards within mediation or arbitration. First, the market would develop a series of different

98. We have recently shown that patients with lower incomes are less likely to sue than are other patients, even when the degree of medical injury is controlled for in the analysis. See Burstin et al., supra note 67. Hence, the complexity introduced by the market in quality products might have the reverse effect intended by Siciliano, for example, as poor patients, no longer protected by the deterrence effect of malpractice, would be subject to still higher rates of substandard care. See Brennan, supra note 93.


approaches. Patients then would select the method of dispute resolution and the standard to be employed by the treating physicians. Guidelines not only would allow patients to identify the standards they want (some might desire blue-ribbon care for heart disease, but bargain-basement for kidney problems), but also would ease the adjudication of disputes. Thus, they would play the specification role necessary for multiple standards to work.

This vision is comprehensive, but it seriously overstates the merits of practice guidelines. While they undoubtedly will play some role in traditional litigation in the near future, the overall impact of algorithms or guidelines is likely to remain small simply because they are vague and apply to few clinical situations that give rise to injuries. Additionally, guidelines are primarily designed to address issues of appropriateness, not general quality matters. Thus, they infrequently specify the entire standard of care expected in a given case. Estimates are that less than 20% of medical injuries would be addressed by existing parameters. It seems unreasonable to those who have reviewed claims files that algorithms will ever be so well and broadly developed that they will prove dispositive in more than a handful of situations. The guideline concept, therefore, seems an unconvincing approach to solve the process problems that exist in the unitary standard world, let alone the multiple standard one.

It appears, then, that proposals for moving away from the unitary, profession-specified standard are unlikely to gain much headway, even if one restricts the critique to efficient process concerns. The more steadfast opposition,

102. Havighurst's proposal is also comprehensive in that it addresses not only quality, but also access, cost containment and justice. His argument, like Siliciano's, is that a market with cheap products will increase access. He also believes competition will decrease the cost of medical care. Finally, the market, in this vision, provides the greatest procedural justice.

103. See Arnold M. Epstein, The Outcomes Movement—Will It Get Us Where We Want to Go?, 323 NEW ENG. J. MED. 266, 268-69 (1990).

104. Appropriateness must be considered a subset of the general quality issues. Consider the following example: a physician decides to recommend that a patient undergo coronary angiography. The patient has been having some atypical chest pains, not associated with exertion. The patient has no cardiac risk factors. The physician proceeds to perform the angiography which is done in an expert fashion. No significant coronary artery disease is found. The procedure would not be appropriate if the proper indications for undertaking this procedure were lacking. The guidelines movement is intended to provide insurers and physicians with a crisp sets of indications for procedures. On the other hand, the performance of the procedure itself met the standard expected of the reasonable medical practitioner. Hence, it would be unlikely to give rise to medical malpractice litigation. See Brennan, supra note 100, at 70-74.


106. Another process problem is that physician behavior may in many ways frustrate the intent of the multiple standard approach. For example, what if a doctor had a patient who she thought needed an MRI scan to make the diagnosis of multiple sclerosis? Assume also that this patient's health insurance does not pay for an MRI scan. The doctor might find it an ethical duty to try to cheat the system by getting this patient the MRI scan. She could go to the doctor who supervises the MRI scans in her hospital and beg him to do an MRI scan without charging the patient. This kind of cheating could become rampant. Moreover, it is difficult to understand how even stringent financial penalties could control such behavior. This type of concern is not addressed by Siliciano or Havighurst.
Improving the Quality of Medical Care

however, will most likely come from those affronted by the ethical implications of having various levels of care. Siliciano,107 and occasionally Havighurst,108 allude to the symbolic importance of the single standard of care, but discuss it little. If multiple-standard proposals ever gain momentum, many will step forward to oppose what they see as efforts to confine the poor to second- or third-class medical care. While Havighurst offers humane reasons for the proposals, others will see just the opposite.109 Politicians are not likely to find second-class care proposals palatable.

In summary, radical notions of mandatory, binding ADR that entail the use of multiple standards of care, like S. 1232, are not intellectually or politically viable at this point. Encouragement of voluntary or nonbinding ADR techniques will likely continue, but history suggests they will have little impact on dispute resolution. Most lawyers, as well as their clients, will continue to favor traditional malpractice litigation.

VI. ADMINISTRATIVE ALTERNATIVE TO TORTS: THE AMA PROPOSAL

Having rejected traditional tort reform, and having suggested that more radical market-based approaches that entail mandatory ADR methods would be impractical, I now turn to two administrative approaches to medical injury compensation and deterrence that have not yet been formulated as congressional proposals: the American Medical Association's Administrative Tribunal and a no-fault patient compensation model proposed by Professor Paul Weiler of Harvard Law School.110 These reforms share a commitment to administrative claims processing that is independent of the common law courts. In that sense, they represent more radical reform than simple encouragement of alternative dispute resolution mechanisms. On the other hand, both retain unitary standards for judging the competence of medical practitioners. In most other ways, however, the AMA and Weiler models are dissimilar.

107. Siliciano provides a long and sympathetic discussion of the instrumental value of the unitary standard. See Siliciano, supra note 93, at 459-68. He ends up rejecting it because of the access implications. If access issues were addressed by payer reform, much of the instrumental value of the unitary standard would be restored.


109. Concerns about second-class care have been raised by opponents of the Oregon Medicaid rationing plan. See Peter Budetti, Medicaid Rationing in Oregon: Political Wolf in Sheep's Clothing, 2 HEALTH MATRIX 205 (1991); see also, Max Mehlman, The Oregon Medicaid Program: Is It Just?, 2 HEALTH MATRIX 175 (1991).

110. In this discussion, I rely on the AMA/SPECIALTY SOCIETY MEDICAL LIABILITY PROJECT, A PROPOSED ALTERNATIVE TO THE CIVIL JUSTICE SYSTEM FOR RESOLVING MEDICAL LIABILITY DISPUTES: A FAULT-BASED ADMINISTRATIVE SYSTEM (1987) [hereinafter A PROPOSED ALTERNATIVE]. For Weiler's work I rely in general on WEILER, supra note 40, at 114-58. While my views and those of Weiler diverge somewhat, we are in general agreement about the relative benefits of a strict liability/no-fault proposal. See Weiler & Brennan, supra note 40, at 54-55.
The American Medical Association's administrative fault-based system is meant to overcome what the AMA sees as the main problems with tort litigation. These are: (1) the inability of many victims of medical negligence to gain access to attorneys, largely because their claims will not result in substantial awards; and (2) the inappropriate and ineffective use of juries as a way to resolve complicated medical disputes. In addition, the proposal seems to be based on the perception that massive jury awards are threatening the affordability of liability insurance; this is somewhat paradoxical given the above concern about victims' lack of access to courts.

In place of tort litigation, the AMA would create a State Medical Board. The Board would function as part of the state government, with its leadership appointed by the governor. By submitting a relatively simple form, patients could have their medical care reviewed by claims adjustors hired by the state. Claims with merit would undergo a second evaluation by a medical specialist hired by the Board. The expert would assist the claimant in evaluating the claim and any settlement offered by defendants. Before moving to a hearing, blind settlement offers by both parties would be required.

If there is no settlement the Board's general counsel would provide an attorney for the patient. A hearing examiner would supervise discovery on an expedited basis and evaluate the expert testimony that both parties would bring to a hearing. At the hearing, the examiner would be allowed to bring independent expertise to bear. Within ninety days, the examiner would issue a written opinion regarding liability. The Medical Board would act as an appellate review panel. The review would consist of a full independent determination of the claim. Appeal from the Medical Board's decision could be made to an intermediate appellate court within the state, but the standard for review would be the usual standard for judicial review of administrative proceedings: the court could overturn only those decisions found to be arbitrary and capricious.¹¹¹

Unlike Paul Weiler's proposal discussed below, the AMA's liability plan retains fault as the basis for liability. It provides a specific definition of reasonableness: that of a prudent and competent practitioner.¹¹² The new plan also endorses proportionate liability, caps on noneconomic damages, economic damages that reflect realistic market replacement costs, several rather than joint and several liability, and periodic payments for awards greater than $100,000.¹¹³

The Medical Board not only would review determinations at hearings, but

¹¹¹. For more details on the functioning of the panel see A PROPOSED ALTERNATIVE, supra note 110, at 19-34. See also Kirk Johnson et al., A Fault-Based Administrative Alternative for Resolving Medical Malpractice Claims, 42 VAND. L. REV. 1365 (1989).
¹¹². See A PROPOSED ALTERNATIVE, supra note 110, at 94.
¹¹³. Id. at 135-48. Most of these reforms are quite similar to the tort-reform proposals endorsed by the variety of congressional bills discussed above. See supra text accompanying notes 54-57.
Improving the Quality of Medical Care

also would be integrated into the credentialing and disciplinary functions of existing state licensing boards. In addition, the Medical Board would act as a clearinghouse for all information on individual providers, including disciplinary actions taken by hospitals and by other states. The Medical Board would thoroughly review all such actions and compile complete records of violations reported about physicians.

A great deal of ink has been spilled regarding the constitutionality of the AMA’s proposal.\textsuperscript{114} It is difficult to predict exactly how the AMA’s proposal would withstand constitutional challenge. Indeed, the outcome will likely turn on the specific measures enacted by each individual state that embraces the AMA approach.

The three major benefits that are touted on behalf of the AMA’s administrative fault-based proposal conform to the AMA’s perception of the drawbacks of conventional tort litigation. The first is that claims will be resolved more fairly because they are brought before expert panels. It is often stated that lay juries are incapable of addressing the complex issues that arise in litigation of scientific matters, including medical malpractice.\textsuperscript{115} This is a substantial reason for the AMA’s proposal; its supporters note time and again the theoretical inappropriateness of allowing non-experts to judge the behavior of highly trained specialists.\textsuperscript{116} They argue that a jury decision is no better than a lottery, and that an expert panel would restore predictability to medical disputes.

This opinion, however, ignores much of the empirical literature on the effect of having lay juries assess medical malpractice claims. In malpractice law, the majority of cases settle before trial. Among the cases that do go to trial, the variation in jury awards is great, but much of the variation can be attributed to differences in the severity of the injury.\textsuperscript{117} Moreover, the variation in jury awards is less than in cases settled by insurers, who presumably rely on experts.\textsuperscript{118}

Thomas Metzloff’s thorough review of jury decisions in malpractice cases

\textsuperscript{114} See, e.g., \textsc{Weiler}, supra note 40, at 117; Hugh E. Reynolds et al., \textit{A Constitutional Analysis of the American Medical Association’s Medical Liability Project Proposal}, 1 CTS. HEALTH SCI. & L. 58 (1990).


\textsuperscript{116} See Johnson et al., supra note 111, at 1375.

\textsuperscript{117} E.g., Randall Bovbjerg et al., \textit{Valuing Life and Limb in Tort: Scheduling ‘Pain and Suffering,’} 83 NW. U. L. REV. 908, 919-24 (1989) [hereinafter Bovbjerg, \textit{Scheduling Pain and Suffering}]. Randall Bovbjerg et al. suggest that the sympathy of jurors for the particular injury and resulting disability of a plaintiff may play an important role in explaining the variation in the amount of damages between malpractice suits and other types of tort cases. See Randall Bovbjerg et al., \textit{Juries and Justice: Are Malpractice and Other Personal Injuries Created Equal?}, 54 LAW & CONTEMP. PROBS., Winter 1991, at 5.

reveals that juries usually decide the way that insurers would predict when it comes to assessing liability, and any uncertainty is the result of differences in damages for similar injury cases. These studies imply that the problem with the jury system is not in the understanding of scientific evidence of medical injury and negligence, but rather in the understanding of the consequences of injury. Hence, Bovbjerg, Sloan and Blumstein recommend implementing a schedule of damages for non-monetary losses. Although none of these studies suggest that an expert panel would do a worse job than would juries, replacement of juries should not be considered a sufficient reason to support reform as radical as that proposed by the AMA.

The second major rationalization for the AMA’s proposal is that it will be more expedient and less costly. Malpractice litigation is very expensive, with administrative costs that are now thought to exceed 50%. Furthermore, on average it takes over three years before there is any payment on a claim. Still, this does not mean that an administrative scheme will resolve cases more quickly. In particular, earlier studies of screening panels similar to the AMA’s Board have suggested that massive delays are common. Therefore, we can expect a significant amount of non-compliance with the 90-day disposition rule supported by the AMA.

The notion that the administrative fault method will be less costly also has little support. If administrative costs are directly related to the nature of the decision that must be made, it follows that the administrative fault-based system has an inconsequential theoretical advantage over the common law fault-based system. Both must address the complex problems of causation (did medical management cause the injury?) as well as negligence (was the standard of care met?). Insofar as the latter is more complicated and therefore more costly, retaining it within the AMA program suggests that the expenditures on administration may be quite similar to those of the present tort system.

The questions of cost and funding are critical to the AMA’s proposal. The AMA endorses the establishment of a public agency, supported by state revenues. The speed, and in many ways the fairness, of the system will be dependent on adequate funds to support the investigators and court-appointed lawyers. The program removes the plaintiff’s attorney, motivated by a contingency fee, from the scene. Hence, medical liability would rely, more than ever, on the government.

This reliance on government is troubling. As state budgets across the country shrink, one can support only anxiously a program that could easily

120. Bovbjerg, Scheduling Pain and Suffering, supra note 117, at 975.
121. See Weiler, supra note 40, at 53.
123. See Shmanske & Stevens, supra note 49.
Improving the Quality of Medical Care

become a target of budget cutting. Massachusetts is a telling example of the kind of disasters that can occur. After the legislature passed a sweeping set of laws in the mid-1980s, when the state was in the midst of the Dukakis miracle, it appeared that the state Board of Registration in Medicine would begin to undertake comprehensive oversight of doctors and hospitals. Instead, after a new Republican administration's budget cuts, the Board is woefully understaffed, and cannot begin to address the flood of information supplied by providers under the 1986 law. Similar circumstances could occur in states which replace malpractice litigation with the AMA administrative proposal; if the state Medical Board is unable to fulfill its duty, both the compensation and deterrence function of tort law would be compromised.

The third supposed advantage of the AMA proposal is the greater deterrence it will bring about, as a result of the lower barriers to claims. An injured plaintiff must file a simple form to initiate a claim, and can then expect state assistance in processing and prosecuting the case. Of course, if this process is not adequately funded, the wait for appropriate representation could be quite long. Perhaps some delays could be tolerated if the AMA proposal induced more claims and greater deterrence. One must weigh, however, the benefits of a simplified process and public representation against the loss of a plaintiff's attorney motivated to perform well by economic gain. Furthermore, the proposal incorporates a series of tort reforms that have been shown to decrease claiming. Therefore, the predicted increase in claiming, and hence deterrence, might not occur.

Given these arguments, one cannot endorse the AMA fault-based proposal with enthusiasm. Its theoretical benefits are limited. Although an experiment might answer some empirical questions and demonstrate the efficacy of administrative fault, a complete shift in even one state would be ill advised.

VII. ADMINISTRATIVE ALTERNATIVES TO TORTS: NO-FAULT

No-fault administrative compensation systems have long been advocated as a more rational method for compensating and deterring injuries from accidents. Generally, no-fault removes consideration of negligence from the determination of compensation (and so in many ways is equivalent to strict liability). An injured individual need only show causation and injury. No-fault compensation for medical injuries is the norm in several countries, most notably Sweden and New Zealand.

124. See Saltus, supra note 23.
In the United States, no-fault compensation has long been ruled out because of its presumed cost. For example, our research revealed that in 1984 there were 27,000 negligent medical injuries in New York, all of which could have given rise to successful tort claims. In addition, there were another 61,000 non-negligent injuries that would have been compensated by a no-fault system. Meanwhile, there were only 3,600 malpractice claims. To resolve only these claims, providers (hospitals and physicians) paid approximately $1.2 billion in premiums to professional liability insurers. Thus, moving to no-fault may appear to be impossible economically.

There are, however, some reasons to believe an administrative no-fault program would not be as expensive as the above figures suggest. First, as noted, administrative costs of tort law now exceed 50% of premiums paid. It is doubtful that a no-fault compensation scheme for medical injury would experience such high costs. Indeed, the best-known analogy, worker’s compensation, produces administrative expenses of about 20%.126

The reasons for this efficiency go beyond those offered by advocates of the AMA fault-based proposal. As previously mentioned, making causal and attributive judgments about medical injuries is relatively simple and inexpensive.127 Negligence determinations, on the other hand, are quite difficult and unreliable and, therefore, absorb higher costs. The move to no-fault takes advantage not only of the efficiencies of expert determination, but also of the absence of the difficult negligence judgment. Second, more than 70% of injuries resolve within six months and have relatively small costs.128 It may be that the present tort system is only compensating high-cost serious injuries. The additional costs of paying for the small injuries are relatively small.

In light of these considerations, a group of colleagues and I recently estimated the costs of a hypothetical no-fault plan for the state of New York in 1984.129 We put the following conditions on the compensation system. We required, as have many states, a mandatory collateral source offset. This is equitable from a compensation viewpoint, although it might lessen the deterrence effect. We also assumed that first- or second-party health insurers would continue to occupy a prior position to the compensation fund. We then estimated payments only for the costs of injuries caused by medical management.

To do this analysis, each subgroup of the population (workers, retirees, homemakers, and children) required slightly different survey methods. Combining the amounts for all, discounting appropriately, incorporating the above-noted assumptions, and then developing present value figures for 1989 dollars,

127. See Brennan, Empirical Analysis of Accidents, supra note 9, text accompanying notes 56-57.
128. Id.
129. See Johnson et al., supra note 9.
Improving the Quality of Medical Care

we estimated the overall costs of the hypothetical no-fault plan to be $1.024 billion dollars. Lost wages and losses of household production represent more than 70% of this total.

The final sum is considerably less than the approximately $1.2 billion now being spent in New York State for medical liability insurance. This estimate demonstrates that a no-fault program for medical injury, as outlined, could be an affordable alternative to tort litigation. Of course, there are several caveats. First, we are comparing the estimates of compensable losses suffered by patients injured in 1984 to malpractice costs estimated by insurers for patients injured in 1988. This is a reasonable comparison, however, if one assumes injury rates are stable. This estimate also does not include administrative costs, which would add more than 20% to the total costs. Finally, we have not included compensation for pain and suffering.

In making this estimate we did not specify the no-fault plan in any detail.

130. The total expenditures on malpractice were devised as follows. For 1988, the latest year for which figures were available, the New York State Department of Insurance reported that doctors and hospitals paid approximately $850 million in direct malpractice premiums. Our analysis of data for 1984 indicated that an additional 40-50% over and above direct premiums was spent by various health-care organizations on self-insurance. See Harvard Medical Practice Study, Patients, Doctors, and Lawyers: Medical Injury, Malpractice Litigation, and Patient Compensation in New York ch. 8, at 79 n. 44 (1990).


132. At this time, we are actively pursuing research in Sweden and New Zealand in an effort to understand administrative costs associated with their no-fault programs. This will allow us to develop a more accurate estimate of the total costs of the no-fault alternatives.

The administration of the Swedish system is instructive. If a patient thinks there has been an injury as a result of medical care, application for benefits from the Patient Fund is made using forms available in all clinics and in all hospitals. It is quite common for physicians to encourage patients to file and to help patients fill out the forms. The percentage of claims filed with physician participation probably ranges somewhere between 70-90%. Patients are also assisted throughout the process by a social worker from the hospital. After the initial claim, a physician must write a report concerning the injury.

The reports and patient claims are then transmitted to a central office in Stockholm, where an adjustor registers the complaint and communicates with the patient. The claims adjustor is charged with the initial management of the claim and develops a file that includes the claim, the patient statement, the physician's report and the medical records. Following initial determination of eligibility, the adjustor will contact one of the many doctors who work part or full time for the patient insurance consortium, including a variety of specialists. The fund-employed physicians and claim managers apply specific criteria for eligibility and make a final determination. See Marilyn M. Rosenthal & Troyen A. Brennan, Swedish Patient Injury Compensation: Adaptation to the United States (November 11, 1991) (unpublished manuscript, on file with the Yale Law & Policy Review).

133. A method for scheduling pain and suffering has been offered in Bovbjerg, Scheduling Pain and Suffering, supra note 117. We are preparing several estimates of pain and suffering using the methods they have suggested.

A mature system might function similarly to the system now existing in Sweden. A patient who was medically injured would be assisted in filling out a claims form by a social worker. An adjuster employed by the hospital's liability insurer would review the claim. If it merited further attention, the adjuster would confer with an insurance company physician, and they would put together an offer for the patient that would be subject to approval by a claims board at the company. If the patient did not find the offer acceptable, she could appeal to an appeals board operated by the state. The appeals board would be part of a Medical Injury Administration that would be much smaller than that envisioned by the AMA's proposal. Further appeal could then be made to an intermediate level state court, based on an "arbitrary and capricious" standard.

No-fault would undoubtedly cost more than torts, but it would compensate many more people, removing the costs of negligent and non-negligent injury from those who must now bear them. In this regard, the no-fault compensation proposal and proposals for universal access to health care share many of the same justice-based rationales. While the right to compensation after an injury is quite distinct philosophically from a right to health care, elaboration of an entitlement to care for illness and support for the costs of accidents regardless of fault are both steps toward a more complete social welfare safety net. Conversely, traditional tort reform increases the victims' share of the costs of accidents and has little in common with the impulses to help the uninsured bear the costs of ill health.

In addition to these philosophical similarities, no-fault also works well with universal access because the two, in tandem, make the administrative no-fault system more affordable. The overall and administrative costs would drop significantly if the no-fault program did not have to deal with those individuals whose adverse events result primarily in medical care costs.

The deterrence argument has long challenged those who advocate no-fault compensation. In Sweden, for instance, fees paid by each citizen into a Patients' Fund underwrite the program. Therefore, claims brought against the Fund do not create any economic penalties for providers, and there is no economic deterrence. This could be remedied if Sweden were willing to move to enterprise liability, with individual hospitals paying experience-rated

134. Critics might point out that inflation would be a problem for an administrative compensation scheme, as it has been for workers' compensation. See Leslie I. Boden et al., Workers' Compensation Research Inst., Medical Cost Containment in Workers' Compensation: A National Inventory, 1991-1992 (1992). Of course, much of the rise in workers' compensation insurance rates is due to medical-care costs. If these were handled by a universal-access system that emphasizes cost containment, a medical injury compensation plan looks more affordable.

Improving the Quality of Medical Care

premiums based on their historic accident rate. Indeed, this is the basis for Paul Weiler's proposed no-fault medical injury system, in which the funds for compensation would be generated through fees paid by hospitals to insurers, who would then pay successful claims.

In many ways, enterprise liability with experience rating is preferable to existing methods of tort deterrence. Tort deterrence still emphasizes the individual treating physician as the locus of responsibility for medical injuries. Yet the individual physician has few methods for addressing error prevention systematically. He or she generally sees a suit as an aberration, an event over which he or she has no control. The possibility of preventing the suit is rarely part of any calculation made by a defendant provider. Indeed, this view is supported by a recent statistical analysis of malpractice claims which suggests that accident avoidance strategies cannot be based on the experience of individual practitioners. A hospital, on the other hand, has the necessary resources and appropriate experience with multiple claims to take rational steps towards prevention. Hospitals and their medical staffs have long been charged with the responsibility of providing high-quality care to patients. Many hospitals have well-developed risk management systems, at least some of which appear to decrease the rate of malpractice claims that are filed against them. In addition, the comprehensive information on medical injuries which would be available under a no-fault system could be readily integrated into a "total quality management" (TQM) approach that would emphasize organizational safety.

136. Kip Viscusi has shown that this method of underwriting workers' compensation benefits has very strong deterrence effects. See Michael J. Moore & W. Kip Viscusi, Compensation Mechanisms for Job Risks: Wages, Workers' Compensation and Product Liability 151-160 (1990). The beauty of experience-rating hospitals is that they have the aggregation of claims that can make the rating work rationally. The same is not true of physicians, who are exposed to claims relatively infrequently, making individual provider rating unattractive. See John E. Rolph et al., Malpractice Claims Data as a Quality Improvement Tool: II. Is Targeting Effective?, 266 JAMA 2093 (1991).

137. See Weiler, supra note 40, at 124-32.

138. See Brennan, supra note 2, at 133-36. In the past, physicians were the sole target of claims as a result of the charitable immunity for hospitals and the relative immunity afforded to nurses by the borrowed servant doctrine. See George Annas et al., American Health Law 240-50 (1989).

139. As part of our comprehensive study of medical malpractice we conducted in-depth interviews with over 100 physicians, half of whom had been sued. Critical analysis of these interviews reveals that most physicians see themselves as analogous to unjustly charged suspects in a criminal proceeding. Their main reactions to being sued are surprise and a sense of powerlessness. Harvard Medical Practice Study, supra note 130, ch. 9 at 58.

140. See Rolph et al., supra note 136.


142. See Brennan, supra note 2, at 122-24.


144. See Berwick, supra note 17 (describing TQM in detail).
In view of the advantages of institutional liability, the law of malpractice has slowly evolved to hold hospitals themselves responsible for injuries to patients.\footnote{145} In the past, common law doctrines such as charitable immunity and fellow servant rules prohibited suits against hospitals and their employees. Increasingly, however, courts are finding hospitals liable for injuries occurring therein, independent of provider negligence. Enterprise liability merely accelerates this process.

There are additional reasons why no-fault compensation is preferable to tort law. Tort law’s deterrent signal is designed only to bring about prevention of negligent medical injuries, yet our research suggests that a significant number of medical injuries that physicians do not term negligent are nonetheless preventable.\footnote{146} The no-fault approach would capture all preventable adverse outcomes, and presumably would create pressure to prevent some adverse outcomes that tort law does not. For instance, hospitals would have incentives to address drug treatment errors that are presently considered non-negligent, yet are unintended and potentially preventable. Therefore, compensation of non-negligent injuries could help to bring about their prevention, whereas the present tort system brings no preventive effect to bear on such injuries.

This broader, more rational compensation system is also arguably more just than our present method of haphazard compensation. A greater number of people would receive compensation for injuries, the costs of which they would otherwise have to bear by themselves. Indeed, the no-fault system could be designed to address chronic, severely debilitating injuries that presently go uncompensated.

The no-fault compensation program also appears to have an advantage over the AMA’s fault-based system in that it does not require the development of as large a bureaucracy. Many claims could be handled by insurance adjusters, as is currently done with workers’ compensation. Only those claims involving significant disputes would be funneled into the public administrative system. Moreover, since no-fault deterrence operates privately through experience-rated insurance premiums, the system would be less vulnerable to the budget crises of state governments.

Admittedly, a hospital-based approach does have some troublesome features. One daunting problem will be the need to shift funds from providers to hospitals as part of the private, insurance-driven scheme. Since under this plan the state will presumably be exonerating providers from liability for injuries in hospitals, the providers’ malpractice premiums should drop. On the other
Improving the Quality of Medical Care

hand, the strict liability system would create much larger premiums for hospitals. It follows that physicians would have to pay an amount to hospitals equal to the amount by which their own premiums had decreased. A voluntary system for accomplishing these shifts seems unrealistic.

Another problem with a hospital-based approach is how to address injuries that occur in the outpatient setting. If we simply graft hospital strict liability onto existing common law, we would create incentives for hospitals to claim that patients were harmed in the course of outpatient care, while doctors would try to establish that all injuries were the responsibility of the hospital. Courts would probably be hesitant to hold hospitals liable for outpatient injuries.  

Both of these problems become more tractable if the introduction of a no-fault program is integrated with universal access reforms. If we undertake significant modifications in payment methods, we could make appropriate proportionate changes in reimbursement levels so that both physicians and hospitals are made whole under the new liability premiums: physicians would be paid less and hospitals would be reimbursed at higher rates. It would be possible for the system to cover outpatient injuries as well, especially if physicians are linked to particular hospitals as part of global budgeting.

A link between universal access and no-fault medical injury compensation would solve another major administrative problem. The single-payer system now being considered in some states could be adapted to take into account hospital experience-rated insurance premiums for medical injuries. Reimbursement for hospitals, and their affiliated physicians, could be modified according to their losses from compensation of injuries. The savings for lower injury rates could be passed along to more careful hospitals and their staff. Determining the insurance premium paid by hospitals would be challenging and would depend on a complicated mix of factors including severity of patient illness, carefulness of providers, and income levels of injured patients. This task, however, would not be beyond the capabilities of careful actuaries. For advocates of no-fault medical insurance and universal access, the complementary nature of these reforms is especially attractive.

Of course, deterrence under a no-fault plan entails more thorough organizational monitoring of physicians. Many observers of medical care have suggested that such oversight and control of physician behavior is critical to serious health-care reform.  The optimal behavior from both deterrence and compensation viewpoints would be to have physicians report injuries to the hospital administration. This information would be processed using epidemiological techniques to identify risk factors for medical injuries, and would lead


148. See, e.g., Hall, supra note 96.
to the creation of intervention strategies. Continuous interventions of this sort could form a major part of a hospital's total quality management scheme.\textsuperscript{149}

Of course, some may discount the possibility of physician participation in this scheme, especially since the experience-rated insurance system would impose economic sanctions on the hospitals with higher injury rates. Moreover, doctors would have to accept the greater role of hospital administrators in quality assurance matters.\textsuperscript{150} On the other hand, since the no-fault system would remove a good deal of the finger-pointing that presently surrounds fault-based litigation, doctors might be more enthusiastic about their participation in the process. Indeed, we have already performed a real-life test of physician self-reporting, with excellent results.\textsuperscript{151}

VIII. CONCLUSION

This overview of quality assurance leads to several conclusions. Reviewing the evidence of the incidence of medical injuries and the manner in which they are compensated suggests that traditional tort reform, which decreases the number of malpractice suits, is intellectually indefensible. Among the more radical alternatives to tort law, a no-fault method of compensation for medical injuries, linked to experience-rated institutional liability, holds the greatest promise of significant improvement in our health-care system. This reform could be most easily instituted if linked to changes in health-care funding that emphasize universal access. While a no-fault compensation system would not reduce overall costs, it would reduce spending on the administration of claims and would distribute compensation for injuries to a much wider group of patients. The system would not require a large bureaucracy constantly vulnerable to budget cuts. Most importantly, such a system would force hospitals to adopt a systemic approach to quality assurance, thus bringing about significant improvement in the quality of care provided by the medical establishment.

\textsuperscript{149} See Troyen A. Brennan et al., \textit{Integrating Providers into Quality Improvement: A Pilot Project at One Hospital}, 1 ISSUES QUALITY MGMT. (forthcoming 1992).

\textsuperscript{150} Evidence that the locus of decision-making power, at least in the area of physician credentialing, is slowly shifting to administrators is thoroughly reviewed in John D. Blum, \textit{Economic Credentialing: A New Twist in Hospital Appraisal Processes}, 12 J. LEGAL MED. 427 (1991).

\textsuperscript{151} Laura Petersen et al., \textit{Reporting by Residents of Adverse Events on a Medical Service}, 40 CLINICAL RES. 183A (1992) (abstract).