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MEDICAL MALPRACTICE AND COST CONTAINMENT: TIGHTENING THE SCREWS

Barry R. Furrow*

Professor Furrow analyzes the interaction of health care cost containment with tort doctrine and the tort process. He demonstrates that both tort law and medical decisionmaking have always implicitly recognized cost considerations. He examines this history as it now applies in the current explicitly cost-conscious mileau.

Prohibitive cost constraints as a defense to medical malpractice liability is rejected. Professor Furrow concludes that focusing attention on the institutional provider rather than the individual practitioner is a healthy trend in light of the growing centrality of the institution in regulating the availability of health care services and technology and in establishing health care standards for its practitioners. Finally, he notes that reduced intervention through involving the patient in the decisionmaking process and through resisting the urge to act affirmatively in the face of uncertainty can not only reduce primary costs, it can also reduce the unnecessary secondary costs, both economic and social, of medical introspection and establishing appropriate, cost-sensitive standards of care.

INTRODUCTION

Even in the corpus of such a scientifically based profession as medicine one finds a heart of solid skill surrounded by a large fatty mass of unexamined practices uncritically honored because of their association with the core skills .**

SENSITIVITY TO COST has increasingly dominated the practice of medicine and the delivery of health care in the decade and a half since Friedson wrote of the "large fatty mass of unexamined practices." American hospitals and physicians are struggling to contain the escalating costs of medical care in the face of pressure from Medicare payment reforms, corporate and insurer demands, and the market. Payment for services rendered on a retrospective basis, with no questions asked, is a closed chapter in history for

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^{**} E. FRIEDSON, PROFESSIONAL DOMINANCE 181 (1970).

^{1.} See Herzling & Schwartz, How Companies Tackle Health Care Costs: Part I, 63

hospitals treating Medicare patients;² physician services are next on the regulatory agenda.

The chapter closed for hospitals in 1983 when Congress adopted the diagnosis-related groups (DRGs) program. This DRG system was designed to provide incentives for cost containment by creating an administered price system under which hospitals are paid a predetermined price for services based upon an average cost calculation for a patient with a particular diagnosis. Hospitals can no longer charge what they want, nor even charge based on their cost. The DRG payment structure prescribes the limits.

This contrasts sharply with the previous fee-for-service system under which the hospital billed the federal government for the actual charges incurred and was paid with little risk of challenge. With no incentive to control costs, the health care bill grew to a significant percentage of the Gross National Product. DRGs strive to slow or halt this inflationary trend. Hospitals must now be "DRG-efficient in providing services" with real costs kept lower than DRG rates in order to generate surplus for equipment acquisition, salary increases, and service improvement.³

The Medicare DRG system, in Lester Thurow's words, is likely to be "the ripple that will build into the wave of the future." Several states have adopted the DRG model for their Medicaid programs. Even a few private insurers have adopted some version of the DRG model to control their reimbursement costs. Thurow predicts that this trend will ultimately result in a capitation payment system. Institutional structures such as health maintenance organizations (HMOs) already operate on a capitation basis, linking the financial solvency of the organization to the ability of the doctor to limit costs.

HARV. BUS. REV. 69 (1985); Herzlinger, How Companies Tackle Health Care Costs: Part II, 63 HARV. BUS. REV. 108 (1985).

^{2.} The hospital industry has done surprisingly well to date under prospective payment. The 1984 financial results for all 5,000 American hospitals show that surplus revenue more than doubled, with the large urban and suburban hospitals thriving. Only the small rural hospitals and the public hospitals have suffered, since they treat large numbers of the uninsured or underinsured poor. Waldholz, *Most Hospitals Quickly Learn to Be Profitable*, Wall St. J., Aug. 28, 1985, at 6. See also Prospective Payment Assessment Commission, Medicare Prospective Payment and the American Health Care System: Report to the Congress 52 (Feb. 1986) (noting the enhanced profitability and liquidity experienced by hospitals).

^{3.} See Dolenc & Dougherty, DRGs: The Counterrevolution in Financing Health Care, 15 HASTINGS CENTER REP., June 1985, at 19.

^{4.} Thurow, Medicine versus Economics, 313 New Eng. J. Med. 611, 612 (1985).

^{5.} Id. at 613.

The institution, whether hospital, HMO, or other form, has no direct authority to tell a doctor how to practice medicine. The institution can only decide which facilities to provide (neonatal intensive care units, burn centers, etc.), limit physician access to certain equipment and services (closed radiology staffs), and set general rules. Yet, while the doctor's treatment decisions remain his own, the indirect pressures can be as powerful as an explicit set of rules for diagnostic and treatment choices, given the extent of institutional control over staff positions.

Doctors feel these cost-containment pressures most strongly, since they are the gatekeepers to health care.⁶ The new economic environment is blurring the line between pure medical decisions and business decisions. As Starr asks, "[W]hen both medical and economic considerations are relevant, which will prevail and who will decide?"⁷

These institutional pressures and the increasing use of prospective payment systems have generated worry among physicians. They fear loss of autonomy as economic values are substituted for medical values, and they worry about rationing of medical resources in unfair ways. There is a concern that medical decision-making will be pressured toward reducing patient utilization of drugs, diagnostic tests, and hospital services at the expense of the quality of care, with particularly pernicious effects on the poor. Finally, they are concerned about the possible ramifications the cost-

6. Fuchs writes:

His role is particularly important with respect to the *cost* of care, for his are usually the pivotal decisions concerning hospitalization, surgery, tests and drugs. Given the uncertainties about the effect of medical care on health, there is frequently a wide range of choice open to the physician on these matters. It follows that a concern with cost requires concentrating on the physician . . . most important, the incentives and constraints that he faces once he has set up practice.

V. Fuchs, Who Shall Live?: Health, Economics, and Social Choice 145 (1974) (emphasis in original). Nearly a decade later, Paul Starr notes the loss in physician control and autonomy in the face of the "coming of the corporation." Doctors still remain the gate-keepers, however. Starr writes:

Profit-making hospitals require doctors to generate admissions and revenues; prepaid health plans, while having the opposite incentives, still require doctors' cooperation to control hospital admissions and overall costs. Because of their dependence on physicians, the corporations will be generous in granting awards, including more autonomy than they give to most other workers.

- P. STARR, THE SOCIAL TRANSFORMATION OF AMERICAN MEDICINE 446 (1982).
 - 7. P. STARR, supra note 6, at 447.
- 8. The worries are voiced by both the media and lawyers who represent the poor. See Grady, The Cruel Price of Cutting Medical Expenses, 7 DISCOVER, May 1986, at 25; Perkinds, The Effects of Health Care Cost Containment on the Poor: An Overview, 19 CLEARINGHOUSE REV. 831 (1985).

Other fears, such as turning patients into "products" or decreasing variety in health care

containment movement may have on their exposure to tort liability. Doctors fear that they will be caught between the Scylla of cost containment and the Charybdis of tort liability.

This Article explores the malpractice implications of the movement toward prospective payment and cost containment. It considers the likely effects of tort doctrine and process on cost-constrained medical decisions. It argues that since the threat of malpractice litigation is one of the incentives which affects medical practice, tort doctrine should be refined to explicitly deal with cost-effective medical decisions. That is, tort suits should operate to create more powerful incentives for institutions, such as hospitals, to scrutinize staff behavior and enhance peer review, focusing doctrinal change more on the institution than on the individual doctor. It concludes that bedside cost constraints should not be allowed as a defense in a tort suit when a doctor decides that a particular patient should forgo a treatment or test that would have been prescribed if the patient had been insured or had greater private resources.

I. COST CONSTRAINTS AND INCENTIVE BUNDLES

A. The Medical Practice Setting

The new prospective payment system and new institutional providers create powerful cost constraint pressures which affect the practice of medicine. These pressures are consciously perceived by doctors during the current zone of transition from the expansive style of practice common to most medical settings to a more constrained style. Cost sensitivity will ultimately be internalized, eventually representing the norm of practice.

These norms are being shaped in bureaucratic settings, typically the hospital. Sociologists and economists share the belief that an individual's behavior responds more to his environment than to his personal characteristics, that the medical setting is more important than past training and values in shaping physician behavior. Thus, the institutional setting will prove critical in this transition phase, and the incentives that affect practice in these bureaucratic settings include both the threat of malpractice litigation and peer pressure.

delivery, are not treated in this Article. For a good discussion, see Dolenc & Dougherty, supra note 3.

^{9.} See E. FRIEDSON, PROFESSION OF MEDICINE: A STUDY OF THE SOCIOLOGY OF APPLIED KNOWLEDGE 90 (1970). For a more recent confirmatory study, see Rhee, Relative Importance of Physicians' Personal and Situational Characteristics for the Quality of Patient Care, 18 J. HEALTH & SOC. BEHAV. 10 (1977).

As to the latter, Friedson noted that colleague control is superceding client control over medical practice in an environment where the solo practitioner is being supplanted by group practice and hospital staff appointments. Consistently with Friedson, sociologists have hypothesized that "the more colleague dependent the practice setting, the more likely there will be self-imposed peer review. Thus, the odds for the provision of higher quality medical care are enhanced in colleague-dependent practices." ¹⁰

The interaction between the pressure to contain costs and the two institutional incentives encouraging quality care (malpractice suits and peer pressure) seem to create an insoluble tension. In fact, however, the two forces can work together, resulting in both reduced health care costs and reduced levels of medical iatrogenesis due to diagnosis and treatment. Cost-constraint forces and the threat of liability must first be unbundled and the components examined separately. These incentives can then be reassembled, so that malpractice doctrine works as it should—as a quality control mechanism, a positive force toward both good and cost-effective medical practice.

B. The Nature of "Cost Constraints"

A cost constraint, as it is coming to operate within the institutional delivery of health care, can be defined as a source of pressure upon clinical decisionmaking through hospital rules or monitoring systems which tie physician salary, staff privileges, or other benefits to effective control of costs. Thus, a salaried doctor's income in a HMO depends upon the end of the year bottom line revenues. In a hospital, salary may be affected through incentive plans; or staff privileges may be revoked, or a reappointment denied, in an extreme case of cost overrun.¹¹

Medical staff incentive compensation plans are designed by hospitals to affect physician treatment decisions indirectly, typically by

^{10.} F. Wolinsky & W. Marder, The Organization of Medical Practice and the Practice of Medicine 24 (1985).

^{11.} For a recent decision upholding a hospital's denial of a staff physician's reappointment, see Knapp v. Palos Community Hosp., 125 Ill. App. 3d 244, 465 N.E.2d 554 (1984). The inquiry concentrated on the doctor's excessive use of lung scans, medications, tests, pacemakers, and pulmonary angiograms. However, the doctor's peers also offered evidence that his excessive testing resulted in 30% higher costs.

Other cases involve internal or external utilization review, where the doctor is found to have failed to meet professional standards. See, e.g., Avol v. Hawthorne Community Hosp., 184 Cal. Rptr. 914 (Cal. Ct. App. 1982); Suckle v. Madison Gen. Hosp., 362 F. Supp. 1196 (W.D. Wis. 1973).

setting certain target levels of volume of care per patient. A doctor is rewarded if he provides good quality care without exceeding the standard. He may pay a penalty, or simply be admonished or put on a list, if he exceeds the limits.¹² The reimbursement system and market forces thus shape these institutional pressures, creating both the risk of rationing and anxiety at the level of clinical decision-making. These incentives also translate into peer pressure as doctors internalize the values of the institution and its goals.

Doctors are anxious about these explicit cost-sensitive pressures, as if they were something new to medical practice. On the contrary, economic incentives have always had an impact on physician behavior.¹³ Different modes of payment merely alter the balance of incentives upon doctors. One recent study, for example, concluded that the use of high profit, high cost tests is higher in large fee-for-service groups than in large prepaid groups.¹⁴

The risk of rationing, although the most serious, is not the only component of the problem under a DRG system.¹⁵ Cost incentives may also lead to an artificial imbalance in the utilization of procedures, leading to overuse of some and underuse of others.

Cost reduction matters most to the staff doctor, since his or her salary and status now become more directly linked to the excess of revenues over costs. Hospitals therefore want physicians, as the gatekeepers, caretakers, and prescribers of drugs, to reduce costs and thereby increase profits for the institution. Hospitals have even hired consultants to ensure that patients are placed in DRG catego-

^{12.} See Weissburg & Stern, Can Hospitals Reward Physicians For Reducing Unnecessary Utilization?, FED. Am. Hosp. Rev. 45, Sept.-Oct. 1985, at 45. The authors note, "Some systems are so complex that they utilize sophisticated computer programs which analyze past performance and the severity of illness of individual patients, while others merely reward a physician if the hospital's costs for a specific patient are less than the DRG payment." Id. See also Morreim, The MD and the DRG, 15 HASTINGS CENTER REP., June 1985, at 30.

^{13.} See Luft, Economic Incentives and Clinical Decisions, in The New Health Care FOR PROFIT: DOCTORS AND HOSPITALS IN A COMPETITIVE ENVIRONMENT 102 (B. Gray ed. 1983) [hereinafter cited as The New Health Care]; Egdahl & Taft, Financial Incentives to Physicians, 315 New Eng. J. Med. 59 (1986).

^{14.} Epstein, Begg & McNeil, The Use of Ambulatory Testing in Prepaid and Fee-For-Service Group Practices, 314 New Eng. J. Med. 1089 (1986).

^{15.} Only under a pure capitation system will the problem of rationing be the main theme. A recent study concludes that 90% of medical and surgical admissions fall into DRG categories for which admission rates are extremely variable. Professional discretion, therefore, plays an important role in determining hospitalization. As a result, hospitals have incentives encouraging doctors to improve the case mix by shifting patients into more profitable DRGs. A shift to more lucrative practice styles will result, feeding inflation. See Wennberg, McPherson & Caper, Will Payment Based on Diagnosis-Related Groups Control Hospital Costs?, 311 New Eng. J. Med. 295 (1984).

ries that reimburse above cost, and have encouraged doctors to diagnose patients in these higher-paying DRGs. They have also encouraged fewer tests and early discharge.¹⁶

C. The Threat of Malpractice

A view of the malpractice suit as an isolated and tragic event in a doctor's life is myopic; litigation generates broader ripples on the sea of medical practice. Tort law is generally viewed as an economic/behavioral mechanism. A rule of liability can substitute for regulation of the quality of medical care. It provides health care practitioners with incentives to reduce injury and medical error, since patients lack the information to monitor the quality of care themselves. The existence of a liability rule and the resulting threat of a lawsuit affect behavior. Anticipation of liability propels potential defendants into taking further safety precautions and buying insurance. The economic model of liability seeks an optimal prevention policy, one which "minimizes the total cost associated with injuries, including the resource and utility costs of injuries themselves, the costs of prevention, and the administrative costs of effecting compensation." ¹⁷

The limitations on the model are substantial, given the effects of insurance and information deficiencies in realistically assessing the risks of being sued. However, one can argue that a lawsuit and a potential judgment have some incentive effect on medical practice, although far from optimal under the economic model. In a variety of ways, the effects of the threat of malpractice suits are apparent in medical practice—in the growth of risk management offices and quality assurance, in changes in informed consent practices, and in recordkeeping. Danzon speculates:

[I]t is not implausible that the current non-trivial incidence of injury due to negligence would be at least ten percent higher, were it not for the incentives for injury prevention, created by the one in ten incidents of malpractice that result in a claim. If so,

^{16.} See Waldholz, supra note 2; Spivey, The Relation Between Hospital Management and Medical Staff Under a Prospective-Payment System, 310 New Eng. J. Med. 984 (1984).

17. P. Danzon, Medical Malpractice: Theory, Evidence, and Public Policy 10 (1985) [hereinafter cited as Medical Malpractice]. Calabresi writes that "the principal function of accident law is to reduce the sum of the costs of accidents and the costs of avoiding accidents This cost, or loss, reduction goal can be divided into three subgoals. . . . The first is reduction of the number and severity of accidents." G. Calabresi, The Costs of Accidents 26 (1970). See also Schwartz & Komesar, Doctors, Damages and Deterrence: An Economic View of Medical Malpractice, 298 New Eng. J. Med. 1282 (1978); The Economics of Medical Malpractice (S. Rottenberg ed. 1978); Danzon, An Economic Analysis of the Medical Malpractice System, 1 Behavioral Sci. & L. 39 (1983).

the malpractice system, despite its costs, is worth retaining. 18

The threat of a tort suit is one force in the bundle of incentives affecting medical practice, reducing the adverse effects of medical misadventures. Salary, patient mix, and the practice setting also provide incentives which shape medical behavior. The threat of a malpractice suit may not operate as directly as the daily pressures and the salary incentives, but it is part of the incentive bundle, and its impact cannot be denied.

The current standards of medical diagnosis and treatment may lead to excessive costs in terms of diagnostic errors, treatment side effects, and drug-related harms. Less may be more in terms of positive patient outcomes, as well as cost reduction. Current reforms of the health care system have focused primarily on cost containment, but quality of care may benefit from the same reforms as well. Malpractice insurance, with its current pricing practices and lack of experience-rating, hardly distinguishes among risk levels in health care providers. But the anxiety effect linked to uncertainty in litigation does have a significant, if imprecisely calibrated, effect.

D. Bundling Cost Constraints and Tort Litigation Together: A First Step

The costs of medical error will be borne by health care providers even if a lawsuit never materializes. The risk of suit is far lower than might be predicted in the universe of medical injuries. Only one of ten incidents of patient injury due to negligent behavior results in a claim, and only a fraction of those claims result in any recovery. However, other incentives prompt hospitals to consider the costs of error and adverse impacts. Consider the "cascade effect," in which a small medical error cascades into larger, and expensive, complications. ²⁰

Reimbursement schemes, whether DRGs or capitation within

^{18.} Danzon, An Economic Analysis of the Medical Malpractice System, 1 BEHAVIORAL Sci. & L. 39 (1983). See generally Schwartz & Komesar, supra note 17. For a study of the effect of informed consent litigation, see Novack, Plumer, Smith, Ochitill, Morrow & Bennett, Changes in Physicians' Attitudes Toward Telling the Cancer Patient, 241 J. A.M.A. 897, 898 (1979) (noting that in 1961, 12% of surveyed doctors generally told a patient about a cancer diagnosis, and by 1977, 98% had a general policy of informing the patient). For a more pessimistic appraisal of the effects of informed consent doctrine in the psychiatric setting, see C.W. LIDZ, A. MEISEL, E. ZERUBAVEL, M. CARTER, R.M. SESTAK & L.H. ROTH, INFORMED CONSENT: A STUDY OF DECISIONMAKING IN PSYCHIATRY (1984).

^{19.} See Danzon, supra note 18, at 42.

^{20.} Robin writes, "As disease becomes more severe, the range and intensity of treatment increases, leading to a greater possibility of iatrogenic episodes." E. ROBIN, MATTERS OF LIFE & DEATH: RISKS VS. BENEFITS OF MEDICAL CARE 59 (1984).

HMOs, will have a powerful incentive effect on these error costs. Under fee-for-service medicine, neither hospitals nor physicians viewed risk reduction as economically necessary, in the sense of absorbing the added costs of medical error. Assume a patient suffers an adverse side effect from a surgical procedure. The complications, including further treatment and extended hospitalization, are expensive. Under cost-based reimbursement, the hospital will, in effect, be rewarded with increased reimbursement from the government or a third-party payor.

Prospective payment produces very different incentives; payment related to a particular diagnosis is fixed at a predetermined level, with no possibility of reimbursement above that level. The hospital, in effect, bears the costs of failure or error. The cost incentives, therefore, encourage the hospital toward increased efficiency by reducing medical error. While it is possible that medical care could suffer in this situation, improved medical care may also result.²¹

The temptations of an institution to dump a patient when a cascade effect occurs and expenses mount must somehow be counterbalanced. The threat of a malpractice suit can provide the needed incentive for hospitals to internalize their error costs, rather than dumping patients who experience unexpected side effects which may prolong their treatment. A variety of tort doctrines, such as the tort duty of nonabandonment, coupled with the emerging "loss of a chance" rule of causation, provide doctrinal flexibility.²² In this way, the threat of a tort suit will force the institution to internalize the costs of error, even if the chances of a malpractice suit for the original errors are statistically slight.

Most commentators have concluded that the pressures of cost containment will cause standards of practice to shift downward, reflecting a diminished intensity of resource use. The tort system, viewed as a mirror of this standard of practice, will simply reflect this downward shift. A doctor will therefore be at no more risk for suit after prospective payment than she was before.²³ It is only the transition that worries most doctors and commentators, since the

^{21.} See Schumacher, Prospective Payment and the Resurgence of Quality, QUALITY REV. BULL, Oct. 1984, at 298.

^{22.} See infra notes 124-29, 154-57 and accompanying text.

^{23.} See Kapp, Legal and Ethical Implications of Health Care Reimbursement by Diagnosis Related Groups, 12 LAW, MED. & HEALTH CARE 245, 250 (1984) (with the shift downward in the standard of practice, mirrored by the tort standard, "[r]ationing would become not an excuse, but an integral part of the caregiver's obligations").

risk of liability exists only during this zone of transition between practice levels. This is too simplistic a view of the effects of cost containment. Tort law is not simply a mirror reflecting prevailing medical practice; as will be seen, it can affirmatively affect medical practice.

II. MEDICAL PRACTICE: SOURCES OF IATROGENIC COSTS

The initial panic induced in physicians and hospitals by prospective payment is understandable; a changing working environment is unpredictable, at least until the transition is complete and the doctor understands and adjusts to the new operating framework. The doctor worries that any cost-sensitive decision—reducing diagnostic testing, choosing a less expensive treatment, or releasing a patient "early"—will expose him or her to liability.

These worries are overly simplistic, assuming an ideal medical environment which does not currently exist. There is no standard protocol for diagnosis and treatment of a given illness; much of medical practice is full of uncertainty and subject to substantial variation. Similarly, there is no immutable tort standard "set" by outsiders to the profession. The standard is a professional one which tolerates a wide range of acceptable approaches and normally mirrors standard practice. Finally, medical care is neither uniformly available to all nor consistently rendered to those who do have access. Substantial variation in medical practice exists at several different levels, incorporating different medical practice styles, different client groups, and different sources of reimbursement for medical services.²⁴

A realistic appraisal of the effects and constructive function of malpractice litigation requires a look at the costs of medical intervention. Malpractice suits are one useful source of incentives, among the bundle of incentives shaping medical practice, and they need to work in tandem with cost pressures to achieve quality, low-cost health care services.

A. The Cost of Intervention

The problem of the doctor and costs, in terms of the spectre of malpractice, is a subset of the larger question of what constitutes good medical practice. If good medical practice is doing all that is

^{24.} Thurow has identified three levels of care: government-paid care for the poor and the elderly; fixed price contract care between health care providers and corporations; and free market individual care, covered by private insurance. See Thurow, supra note 4, at 613.

technologically possible, without resource contraints, then the inverse is arguably malpractice. Physicians have voiced concern along these lines, citing a variety of ethical norms impelling the doctor to do all that is within his power to help the patient, regardless of cost.²⁵

Medical ethicists have talked of the special duties of the doctor in his relationship to the patient, characterizing the doctor as a "special friend"²⁶ with a "sacred trust." Hans Jonas describes this duty as an obligation to ignore social and other concerns which interfere with the care of the specific patient.²⁷

The practice of medicine is considerably more complicated than the abstract statements of the ethical model. In many situations, the doctor as "special friend" might well conclude that he should resist a futile desire to continue to treat when further intervention would be useless.²⁸ Even the extreme statement of the duty—that the doctor should let nothing interfere with the patient's interest "in being cured"29— suggests the natural limits on such a duty. The uncertainty in much medical practice, the substantial practice variation, and the tendencies toward intervention when in doubt lead us toward a need to set limits when the possibility of "cure" is uncertain and the cost of intervention to both the patient and society is substantial. The ethical model operates at the level of clinical decisionmaking, where each patient has a problem in need of a solution. The incentives approach, on the other hand, redirects the ethicist to consider the system-wide costs and benefits. The ethical-medical model and the incentives model need not conflict, once consensus is

^{25.} The Ethical Code of the World Health Association states: "A Doctor owes a patient... all the resources of his science." See also Levinsky, The Doctor's Master, 311 New Eng. J. Med. 1573 (1984).

^{26.} Fried, The Lawyer as Friend: The Moral Foundations of the Laywer-Client Relation, 85 YALE L.J. 1060 (1976).

^{27.} He writes:

In the course of treatment, the physician is obligated to the patient and no one else. He is not the agent of society, nor of the interests of medical science, nor of the patient's family, nor of his co-sufferers, or future sufferers from the same disease. The patient alone counts when he is under the physician's care... The physician is bound not to let any other interest interfere with that of the patient in being cured. But manifestly more sublime norms than contractual ones are involved. We may speak of a sacred trust; strictly by its terms, the doctor is, as it were, alone with his patient and God.

Jonas, Philosophical Reflections on Experimenting with Human Subjects, in CONTEMPORARY ISSUES IN BIOETHICS 411, 417 (T. Beauchamp & L. Walters eds. 1978).

^{28.} It has been argued that no classical duty to prolong life can be found in medical ethics. See Amundsen, The Physician's Obligation to Prolong Life: A Medical Duty Without Classical Roots, 23 HASTINGS CENTER REP. 8, Aug. 1978, at 8.

^{29.} See Jonas, supra note 27.

achieved with respect to the relative importance of various social goals.

The costs of medical intervention are high, not only in terms of the dollars spent on the equipment and personnel utilized in treatment, but also in terms of the iatrogenic, or doctor-induced, patient injuries resulting from much treatment. Every intervention risks an adverse side effect requiring extra treatment, added hospitalization, and ending with permanent patient injury or death in some cases. The best therapy may harm, as the medical profession has long admitted. Adverse drug reactions may occur in as many as fifteen percent of the hospitalized patient population. Deceptively simple and commonplace procedures, such as venipuncture to draw blood for testing, has drawn criticism for its unnecessary iatrogenic effects. Complications from standard procedures are common and life-threatening in a significant percentage of cases. 33

The costs of patient injury due to iatrogenesis or medical error are substantial. The risks of hospitalization "are not trivial . . . the risk of a serious problem may well have increased."³⁴ The costs of adverse outcomes due to surgical error are particularly high. One study concluded that the total cost of hospitalization for a group of surgical patients who experienced adverse outcomes of surgery was \$1,732,432, 1.3% of the hospital's patient-service billings for the year.³⁵ Excess costs totalled \$1,304,152 (about \$40,000 per patient and \$1,000 per patient day.)³⁶ Iatrogenic effects are therefore an important contributor to expensive resource use of medical care.

Diagnosis is central to clinical managment of patients. Yet diagnostic errors can lead to serious patient injury. Doctors often use tests when they are unnecessary and even counterproductive. The

^{30.} See Barr, Hazards of Modern Diagnosis and Therapy—The Price We Pay, 159 J. A.M.A. 1452 (1955); Moser, Diseases of Medical Progress, 255 New Eng. J. Med. 606 (1956).

^{31.} Karch & Lasagna, Adverse Drug Reactions: A Critical Review, 234 J. A.M.A. 1236 (1975).

^{32.} See Smoller & Kruskall, Phlebotomy for Diagnostic Laboratory Tests in Adults: Pattern of Use and Effect on Transfusion Requirements, 314 New Eng. J. Med. 1233 (1986).

^{33.} See Burnum, Medical Vampires, 314 New Eng. J. Med. 2250 (1986) (noting that life-threatening complications associated with intraortic ballon pumping occur in more than 16% of the cases; that few patients in intensive care units have not experienced complications; and that major complications occur in 17% of patients after tracheostomy).

^{34.} Steel, Gertman, Crescenzi & Anderson, Iatrogenic Illness on a General Medical Service at a University Hospital, 304 NEW ENG. J. MED. 638 (1981).

^{35.} Couch, Tilney, Rayner & Moore, The High Cost of Low-Frequency Events, 304 NEW ENG. J. Med. 634 (1981).

^{36.} Id.; see also Zook & Moore, High-Cost Users of Medical Care, 302 New Eng. J. Med. 996 (1980).

reasons include medical training, which teaches the doctor to abhor uncertainty and to divide up a problem into components; peer approval, since a thorough workup impresses colleagues; and available technology, the mere existence of which compels use.³⁷ Medical decisions made by both patients and doctors are often biased toward greater use of technology, even if its use is inappropriate.³⁸ Doctors may overestimate the positive value of diagnostic methods, failing to note that there often is no demonstrated link between a test or a treatment and a good outcome. Robin observes:

The alarming fact is that, for most tests in medicine, we have no acceptable information on either diagnostic efficiency or therapeutic efficiency. Thus, a whole host of procedures, some of them highly invasive and with the potential to be life-threatening, are performed almost routinely.... At the least, excessive testing creates unnecessary expense for the patient (or for society); at the most, it causes harm to the patient.³⁹

Medical decisionmaking may fail to consider the merits or necessity of diagnostic testing and treatments, failing to adequately consider the costs and risks of a procedure.⁴⁰ Critics have advocated conscious weighing by clinicians of costs, risks, and benefits of various treatments and tests. Causes of medical decisionmaking errors may include "[i]nsensitivity to the prevalence of disease, distortion of many probabilities, a tendency to use irrelevant data to support hypotheses, resistance in giving up hypotheses even when there is convincing opposing information, greater ease of recalling more recent events, and altered judgment due to physical and emotional stress."⁴¹

The "cascade effect" alluded to earlier is one example of excess costs generated by cumulative diagnostic and treating errors. In

^{37.} See Spiro, Gastrointestinal Illness: The Hunger for Certainty, in The Machine at the Bedside 341 (S.J. Reiser & M. Anbar eds. 1984) [hereinafter cited as Reiser & Anbar].

^{38.} See Bursztajn, Hamm & Gutheil, The Technological Target: Involving the Patient in Clinical Choices, in Reiser & Anbar, supra note 37, at 177, 190.

^{39.} E. ROBIN, *supra* note 20, at 40. For a detailed discussion of the evaluation of diagnostic technologies and the limits of present evaluation methods, see INST. OF MED., ASSESSING MEDICAL TECHNOLOGIES 80 (1985).

^{40.} A diagnostic tool, for example, should pass two tests: it should potentially change the course of remedial action, and the benefits should exceed its cost (or risk). Anbar, *The Penalties of Excessive Inquisitiveness*, in Reiser & Anbar, *supra* note 37, at 279. For a recent study of outcomes when the level of a medical treatment is reduced, see Zibrak, Rossetti & Wood, *Effect of Reductions in Respiratory Therapy on Patient Outcome*, 315 New Eng. J. Med. 292 (1986).

^{41.} Young, Williams & Eisenberg, The Technological Strategist: Employing Techniques of Clinical Decision Making, in Reiser & Anbar, supra note 37, at 153, 168.

clinical medicine, such a cascade effect occurs when "small commissions, omissions, miscalculations, or errors of judgment" accumulate, usually catalyzed by doctor anxiety and the need to do something. The sources of this effect include a poor data base; an error in data analysis; underestimation of the risks of evaluation or treatment, often due to ignorance of the possibility of false positives; and unwillingness to risk a bad outcome. The most common impetus, however, is medical decision heuristics, or rules of thumb to guide decisionmaking, which lean toward intervention when in doubt. These heuristics often lack empirical justification. They impel action rather than inaction, commission instead of omission—"When in doubt, do it." The choice to avoid action is anxiety producing, unless the doctor learns that an ill-considered diagnostic approach or treatment can generate serious excess costs in the form of patient injury.

Cost is already an integral part of the clinical decision, in the sense that a cost is incurred when a diagnosis is missed or an error leads to patient injury. A risk of a treatment, if it materializes, will cost money—to the patient, to the institution, and to society. The simplest medical decisions inherently involve risk-benefit calculations. Medical decisions are based upon probability estimates, although usually ignored or hidden. Data are often lacking for a rational decision.⁴⁴ The substantial areas of uncertainty in medical practice, coupled with the imperative to use available tools and to reduce uncertainty, lead to excessive patient exposure to risk—and when that risk materializes, excessive costs.

Explicit cost-effectiveness calculations, where possible, are desirable. One strategy is more "cost effective" than another, in Doubilet's formulation, "if it is (a) less costly and at least as effective; (b) more effective and more costly, its additional benefit being worth its additional cost; or (c) less effective and less costly, the added benefit of the rival strategy not being worth its extra cost." Such a test is hard to apply, but at least it draws medical decision-making toward an awareness of the costs and the downside of

^{42.} Mold & Stein, The Cascade Effect in the Clinical Care of Patients, 314 New Eng. J. Med. 512, 513 (1986).

^{43.} Eddy, Variations in Physician Practice: The Role of Uncertainty, 3 HEALTH AFF., Fall 1984, at 74, 85.

^{44. &}quot;Much of medical care is based on a limited and often distorted data base and limited experience, so that potential risks tend to be underestimated and potential benefits tend to be overestimated." E. ROBIN, supra note 20, at 8.

^{45.} Doubilet, Weinstein & McNeil, Use and Misuse of the Term "Cost-Effectiveness" in Medicine, 314 New Eng. J. Med. 253, 254 (1986).

overtesting or treatment.⁴⁶ A single optimal medical strategy may be difficult to articulate, given problems in defining acceptable dollar tradeoffs for years of life gained or lost or other health benefits. Doubilet adds, "What is cost effective in an economically well-endowed health care setting may not be so in a more financially constrained situation."⁴⁷

Acknowledgment of uncertainty where data are lacking has become a major proposal in recent writings on medical care. Physicians have always made tradeoffs based on cost, without stating so explicitly, based upon the individual patient.⁴⁸ That such calculations are difficult to make, and that data are often lacking, does not make the effort less worthwhile. Specialty-wide protocol setting, a practice urged by Wennberg, Eddy, and Morreim,⁴⁹ aims to reduce the uncertainty of medical practice and its attendant costs. What Friedson terms "the fat of unexamined practices" needs to be trimmed by clinical and specialty introspection. Can tort litigation reinforce pressure toward such trimming? It can and must do so, as part of reducing the overall costs of medical iatrogenesis.

B. The Origins of a Medical Standard of Practice

Most clinical policies are not established by an external authority, such as the Food and Drug Administration (FDA) or the National Institutes of Health (NIH), but rather by a flow of reports in the literature, at meetings, and in peer discussions. Over a period of time, Eddy writes, "hundreds of comments can converge to form a policy, which if widely accepted, will become 'standard practice.' "50 This decentralized process of policy setting has advantages: the individual doctor benefits from collective widsom; unproven bursts of enthusiasm are restrained; the best minds can be involved, and can use statistical and other tools to test the policies; and the standard setting is flexible, allowing adaptation to local values and skills. The problems are also serious, however: oversimplification, often ignoring side effects, costs, and risks; empiricism, in which sweeping conclusions are drawn from a few observations;

^{46.} See K. Warner & B. Luce, Cost-Benefit and Cost-Effectiveness Analysis in Health Care: Principles, Practice and Potential (1982).

^{47.} Doubilet, Weinstein & McNeil, supra note 45, at 255.

^{48.} See id.

^{49.} Wennberg, Dealing with Medical Practice Variations: A Proposal for Action, 3 HEALTH AFF., Summer 1984, at 6; Eddy, supra note 43; Morreim, supra note 12.

^{50.} Eddy, Clinical Policies and the Quality of Clinical Practice, 307 New Eng. J. Med. 343 (1982).

^{51.} Id. at 346.

case-selection biases; incentives that push overuse rather than underuse; an advocacy system in which counterarguments may be ignored; expertise and its attendant bias; policy based on consensus, which may exist merely by force of repetition by the largest group of voices; and the inertia of the status quo.⁵²

The diffusion of new medical technologies poses special problems. Once a new technology appears in the literature, most doctors note it.⁵³ Skepticism as to these research findings is not common, even when it is appropriate.⁵⁴ In spite of lack of evidence of efficacy, practitioners have fostered rapid adoption of new technologies such as CT scanning, magnetic resonance imaging, and respirator therapy.⁵⁵ Even if a practitioner is skeptical, the data and opinions available are often inadequate to allow her to evaluate research findings, in that the studies themselves may have significant defects. They may lack information as to how to translate limited clinical research findings into practice, or little guidance may be given to the practitioner for evaluating controversy over earlier studies. Furthermore, the practitioner may not be aware of the unique nature of clinical trials.⁵⁶

The phenomenon of medical-practice variation highlights the role of uncertainty in much of medical practice. Wennberg, whose studies of variation are often cited, has observed:

[In Maine,] by the time women reach seventy years of age in one hospital market the likelihood they have undergone a hysterectomy is 20 percent while in another market is [sic] is 70 percent. In Iowa, the chances that male residents who reach age eighty-five have undergone prostatectomy range from a low of 15 percent to a high of more than 60 percent in different hospital markets. In Vermont the probability that resident children will undergo a tonsillectomy has ranged from a low of 8 percent in

^{52.} Id.

^{53.} See Young, Communications Linking Clinical Research and Clinical Practice, in BI-OMEDICAL INNOVATION 177 (E. Roberts, R. Levy, S. Finkelstein, J. Moskowitz & E. Sondik eds. 1981).

^{54.} See id. at 182.

^{55.} See 1 INTERN. J. TECH. ASSESS. IN HEALTH CARE (1985) for a full issue devoted to magnetic resonance imaging, spectroscopy, and technology diffusion. Shock-wave dissolution of gallstones may be the newest rapidly diffusing treatment for a problem that has been hard to treat. See Saverbruch, Delius, Paumgartner, Holl, Wess, Weber, Hepp, Ing & Brendel, Fragmentation of Gallstones By Extracorporeal Shock Waves, 314 New Eng. J. Med. 818 (1986). The quick acceptance of this "slam-bang" technology has preceded careful evaluation. Mulley, Editorial: Shock-Wave Lithotripsy: Assessing a Slam-Bang Technology, 314 New Eng. J. Med. 845 (1986).

^{56.} See Young, supra note 53, at 190.

one hospital market to a high of nearly 70 percent in another.⁵⁷

Wide variation has been observed in the use of laboratory tests. prescription drugs, X-rays, return appointments, and telephone consultations among similarly trained doctors in a wide variety of practice settings. One study found a seventeen fold variation in lab use among internists in their dealings with clinical patients.⁵⁸ Procedures most subject to variation are those for conditions related to aging, where clinical trials are absent and the outcomes of conservation or nontreatment are unknown. In these circumstances, in the absence of well-defined scientific norms, doctors have widely divergent opinions as to treatments. By contrast, those procedures least subject to variation are those "for which there is a professional consensus on the preferred place or style of treatment."59 A study of the use of a variety of medical and surgical services by Medicare beneficiaries during 1981 confirmed the medical-practice variation findings, documenting large variation "linked directly to the degree of medical consensus concerning the indications for its use."60 The authors were unwilling to equate high use with inappropriate use. however, arguing that there are no clinical data available with which to evaluate the appropriateness of using most procedures in various clinical areas. The study suggests that doctors need to use consensus techniques and decision analysis to address this question.61

The attitudes of individual doctors influence the range of variation when consensus is lacking. Wennberg terms this the "practice style factor." This factor can be explained in part by differences of opinion when scientific information regarding outcomes is lacking; in other instances, it is unrelated to scientific controversies. Wennberg writes:

Physicians in some hospital markets practice medicine in ways that have extremely adverse implications for the cost of care, mo-

^{57.} Wennberg, Dealing With Medical Practice Variations: A Proposal for Action, 3 HEALTH AFF., 6, 9 (1984).

^{58.} Schroeder, Kenders, Cooper & Piemme, Use of Laboratory Tests and Pharmaceuticals: Variation Among Physicians and Effect of Cost Audit on Subsequent Use, 225 J. A.M.A. 969 (1973). For a general overview, see Luft, Economic Incentives and Clinical Decisions, in The New Health Care. supra note 13.

^{59.} Luft, supra note 58, at 102.

^{60.} Chassin, Brook, Park, Keesey, Fink, Kosecoff, Kahn, Merrick & Solomon, Variations in the Use of Medical and Surgical Services by the Medicare Population, 314 NEW Eng. J. Med. 285, 288 (1986) (footnotes omitted).

^{61.} For a discussion of consensus techniques, see Fink, Kosecoff, Chassin & Brook, Consensus Methods: Characteristics and Guidelines for Use, 74 Am. J. Pub. HEALTH 979 (1984).

^{62.} Wennberg, supra note 57, at 7.

tivated perhaps by reasons of their own or their patients' convenience, or because of individualist interpretations of the requirements for "defensive medicine." Whatever the reason, it certainly is not because of adherence to medical standards based on clinical outcome criteria or even on statistical norms based on average performance. 63

The effects of this practice-style factor can be found not only in clinical practice and treatment approaches, but also in hospital use. A Michigan study found that hospital use varied tremendously from community to community. High use communities had a fifty percent greater propensity to hospitalize overall.⁶⁴ This use pattern was driven by doctor decisionmaking as a cultural force with hospital use learned at the community level and transmitted across specialties.⁶⁵

Medical practice may not provide a "cookbook" set of scientifically based practice standards for each set of symptoms. Even where substantial consensus exists, the circumstances and preferences of individual patients necessarily shape treatment. The strongest force in treatment decisions, however, is still the individual doctor's view of her choices in the face of uncertainty. Doctors make decisions that harm patients—out of anxiety, ignorance, and lack of introspection. Some of these decisions are mistaken, error as we commonly use the word. Others are uninformed in terms of a research base, even if standard practice. The link between malpractice law and cost containment is incomplete without a thorough understanding of the costs of medical error and its iatrogenic effects.

III. MALPRACTICE AND MEDICINE: THE MODEL OF THE MIRROR OR THE LENS?

The effect of tort doctrine on medical practice is a complicated one, with different doctrines applicable to the doctor and to the hospital. A careful doctrinal analysis reveals that courts have allowed physicians substantial medical discretion at the clinical level, taking into account resource limitations. At the same time, courts have been less sympathetic to institutional practices that lead to iatrogenic results. The increased judicial scrutiny of the institution as the primary health care provider is a step in the right direction.

^{63.} Id.

^{64.} Griffin, Wilson, Wolfe & Bischak, Clinical Characteristics of Hospital Discharge Rates in Local Communities, unpublished paper in possession of the author.

^{65.} Id

^{66.} See Rubin & Hackbarth, ReViews: The Federal Government, 3 HEALTH Aff., Fall 1984, at 38.

The current cost-containment initiatives by the federal and state governments attempt to affect the cost of health care by affecting physician and institutional behavior. In this environment, tort doctrine can serve to safeguard quality by encouraging peer review in bureaucratic practice settings. The goal in struggling to achieve both cost control and quality care should be to shape policies that favorably manipulate the incentive structure common to institutions.⁶⁷

A. A Taxonomy of Medical Misadventure

The link between medical error and tort culpability is complex and imperfect. The traditional view is that negligence is most often the product of "heedlessness or carelessness, which makes the negligent party unaware of the results which may follow from his act." The theory of culpability for medical misadventure starts with a common sense notion of error, as a deviation from an established standard of care, which deviation could have been prevented and which standard we expect the defendant to know. Willful and negligent acts leading to iatrogenic injury fit well within this traditional view of malpractice. Two other categories of action or inaction fit a bit more uneasily within the traditional framework.

1. Willful and Negligent Acts

Willful acts encompass an intentional deviation from the professional ethical norms of practice, or from recognized procedures and techniques for treatment, without good cause.⁶⁹ Negligent acts are measured against generally accepted norms of practice. The doctor may deviate from accepted practice for a variety of reasons. Negligence can be due to inattentiveness on a particular occasion, even though the doctor is otherwise skillful. It can be attributable to a systematic failure of initial training or a failure to keep abreast of current medical advances.⁷⁰ Or it can result from a personal incapacity of the doctor to deal with this particular disease or patient.⁷¹

The standard of care the courts apply in evaluating these errors

^{67.} See F. Wolinsky & W. Marder, supra note 10, at 148.

^{68.} W. PROSSER, LAW OF TORTS § 32, at 145 (4th ed. 1971).

^{69.} See Gonzales v. Nork, No. 228566, slip op. (Superior Ct., County of Sacramento, Cal. Nov. 19, 1973), reproduced in S. LAW & S. POLAN, PAIN AND PROFIT: THE POLITICS OF MALPRACTICE 215 (1978) (excerpts from the opinion of Judge B. Abbott Goldberg).

^{70.} In Darling v. Charleston Community Memorial Hosp., 33 Ill. 2d 326, 211 N.E.2d 253 (1965), cert. denied, 383 U.S. 946 (1966), the doctor failed to read the latest texts on setting bone fractures.

^{71.} See Engelberg, Rising Stakes for Negligent Doctors, N.Y. Times, Mar. 9, 1986, at E-5

is objective: that level of care offered by a reasonable doctor in the position of the defendant. Holding a doctor accountable for these two categories of error is well accepted, since he has failed to achieve that level of competence which his professional membership indicates he should have achieved (and which he presumably could have with diligence).

2. Fallibility with Regard to the Particular Patient

Each patient is unique and cannot be approached as nothing more than the total of the physicial and chemical mechanisms operating on and within him.⁷² The particular patient is affected by his particular history with all its unique characteristics. Since physicians are not omniscient, perfect knowledge is not attainable. It is therefore not always scientific ignorance that may be to blame, but rather "ignorance of the contingencies of the environmental context." The best therapeutic judgment may thus turn out to be in error, not because the therapist is willful or negligent or because the pertinent science is primitive, but because of the inevitable limits to the doctor's knowledge of the particular patient. Given the uncertainties of any therapeutic intervention on a particular patient, every such intervention is an experiment which risks patient injury, notwithstanding the profession's general knowledge of the intervention's common characteristics.

3. Injuries of Ignorance

Much of medicine has been described as primitive, dependent on "half-way technologies."⁷⁴ Such technologies attempt to "compensate for the incapacitating effects of certain diseases whose course one is unable to do very much about [T]his level of technology is, by its nature, at the same time highly sophisticated and profoundly primitive."⁷⁵

In some areas, medical treatment is in its infancy, with incomplete knowledge as to the etiologies of illness and modes of treat-

⁽discussing the naval surgeon, Commander Donal Billig, who was convicted of negligent homicide for persisting in heart surgery in the face of his clear limitations).

^{72.} See Gorovitz & MacIntyre, Toward a Theory of Medical Fallibility, 1 J. MED. & PHIL. 51 (1976).

^{73.} Id.

See Maxwell, The Iron Lung: Halfway Technology or Necessary Step?, 64 MILBANK
 Q. 3 (1986), for a critique of the "half-way technology" concept as being oversimplified.

^{75.} L. THOMAS, THE LIVES OF A CELL: NOTES OF A BIOLOGY WATCHER 33 (1974). For Thomas' response to Maxwell, supra note 74, see Thomas, Response to James H. Maxwell's Essay, "The Iron Lung", 64 MILBANK Q. 30 (1986).

ment. In other areas, treatment may depend upon techniques which are not sufficiently perfected, creating substantial side effects (like much cancer therapy and drug treatments generally). Iatrogenic effects or misadventures here are often an inevitable result of the infant nature of a medical specialty. In fact, use of the word "error" is inappropriate, since error implies an error-free alternative of diagnosis or treatment. The injury is not due to the failure of the individual physician: nor is it due to any culpable act on a specialtywide level. In some situations, of course, the whole profession may have lagged, failing to integrate evidence of a desirable new practice or risks of an accepted one. It might also be true that a medical specialty has failed to pursue proper studies to transcend the limitations of the existing treatments. An effective tort standard must therefore be sensitive to both concerns. It needs to indirectly encourage introspection with respect to current practices and their limits, while at the same time vitiate liability for injury not linked to error.76

The doctor therefore contends that he cannot be held responsible for harm caused by scientific ignorance or fallibility as to unknowable particulars. If his motivations and intentions are satisfactory and his choice of therapy acceptable within the limits of current knowledge, the argument goes, adverse consequences are not the doctor's fault.⁷⁷ This argument, while superficially attractive, fudges the issue by focusing on current knowledge. Rather, more research, greater efforts at specialty consensus on diagnosis and treatment, and more systematic efforts at analysis of cost-effective medicine might be in order. Iatrogenesis due to ignorance and patient variation may in fact be reducible. In addition, this argument assumes a static state of medicine, while in fact research constantly reduces areas of uncertainty. Finally, the argument based on patient uniqueness tends to snowball all too easily into the proverbial slippery slope, quickly becoming an excuse for all error. Doctors could learn to do better at the clinical level in designing experimental trials to evaluate various treatment approaches.⁷⁸ Much of medicine deals with similar problems, even though afflicting different people, for which standard responses are possible.

^{76.} Cf. Beshada v. Johns-Manville Products, 90 N.J. 191, 447 A.2d 539 (1982) (court pushed strict liability doctrine to its limits, suggesting that the state of the art in practice is irrelevant since more could always be done to reduce risks with the investment of more resources).

^{77.} See Dagi, Cause and Culpability, 1 J. MED. PHIL. 349, 370 (1976).

^{78.} See, e.g., Guyatt, Sackett, Taylor, Chong, Roberts & Pugsley, Determining Optimal Therapy—Randomized Trials in Individual Patients, 314 New Eng. J. Med. 889 (1986).

And tort doctrine does in fact incorporate substantial leeway to account for sensitivity to the particular patient.

B. Parameters of Tort Doctrine: Reflections in the Mirror

The standard of care, for purposes of a tort suit, must be viewed from two perspectives: the institution and the doctor. The tort standard of care operates primarily as a mirror of prevailing practice, but it may also serve as a lens, subjecting current practices to scrutiny in some situations. How much risk do doctors and hospitals face from malpractice suits in a world of cost constraints?

1. The Doctor

The tort system in malpractice cases uses the customary practice of the profession to determine the standard of care for physicians.⁷⁹ The model of the mirror governs strictly in many jurisdictions, with professional standards given conclusive weight so that the trier of fact is prohibited from rejecting the customary practice as improper.⁸⁰ Other jurisdictions allow some flexibility to the physician who deviates from the customary practice.⁸¹ For example, departure from customary practice may be justified, at least in some jurisdictions, if the defendant can present evidence that the prevailing practice is dangerous.⁸² Such evidence may consist of studies which discuss the hazards of the prevailing practice.⁸³

The medical profession, therefore, has been allowed by most

^{79.} One standard formulation is "that degree of care and skill which is expected of a reasonably competent practioner [sic] in the same class to which he belongs, acting in the same or similar circumstances." Blair v. Eblen, 461 S.W.2d 370, 373 (Ky. 1970).

^{80.} See, e.g., Holt v. Godsil, 447 So. 2d 191 (Ala. 1984); Senesac v. Assoc. in Obstetrics & Gynecology, 141 Vt. 310, 449 A.2d 900 (1982). Statutes in some states accomplish the same result. E.g., Tenn. Code Ann. § 29-26-115(a)(1) (1980); Vt. Stat. Ann. tit. 12, § 1908(1) (1984).

^{81.} See, e.g., Harris v. Groth, 99 Wash. 2d 438, 451, 663 P.2d 113, 120 (1983) ("The degree of care actually practiced by members of the profession is only some evidence of what is reasonably prudent—it is not dispositive.").

Judicial flexibility with respect to customary practice can also work to the physician's disadvantage by holding him liable when he conformed to customary practice. See, e.g., Incollingo v. Ewing, 444 Pa. 263, 299, 282 A.2d 206, 217 (1971) (adherence to the customary practice does not mean there can be no prima facie case of negligence); Chiero v. Chicago Osteopathic Hosp., 74 Ill. App. 3d 166, 392 N.E.2d 203 (1979) (evidence that defendant's conduct conformed to general custom is not conclusive; it may be overcome by contrary expert testimony).

^{82.} See, e.g., Toth v. Community Hosp., 22 N.Y.2d 255, 239 N.E.2d 368, 292 N.Y.S.2d 440 (1968).

^{83.} See, e.g., Burton v. Brooklyn Doctors Hosp., 88 A.D.2d 217, 452 N.Y.S.2d 875 (1982).

American courts to set its own tort standard of conduct simply by adopting its own treatment practices. This standard is proved by expert testimony as to the actual pattern of medical practice,⁸⁴ usually without any evaluation of its effectiveness. Judicial deference is usually attributable to both the judicial perception of the specialized and arcane nature of medicine and the difficulties in assessing the merits of the prevailing practice.

The most elaborate recent judicial analysis of the physician standard of care is found in Hall v. Hilbun, a 1985 Mississippi case.85 In Hall, the court considered the problems of a small town Mississippi practitioner. The court identified two prongs comprising the standard of care: a competence component and a resource component. Under the first prong, all physicians should be held to an "objectively ascertained minimally acceptable level of competence ... given the qualifications and level of expertise he holds himself out as possessing and given the circumstances of the particular case."86 This competence component assumes access to knowledge of the sort and degree possessed by practitioners elsewhere in the United States. The court rejected the notion that conformity with medical custom is conclusive of compliance with the standard of care, holding that such conformity is only one factor to be considered. It did note, however, that failure to conform to a medical custom "will generally lead inescapably to the conclusion that the duty of care has been breached."87 The Hall court, therefore, takes the position that failure to comply with custom is presumptively negligent, but the customary practice could be challenged in some circumstances.

This reflects a common judicial view of custom, under which it is either given conclusive weight or presumptive validity. If the plaintiff can show that there is a better practice than customary practice, then *Hall*, *Helling* 88 and a few other cases would allow the plaintiff to prevail. A doctor's failure to meet the customary prac-

^{84.} Most states require the plaintiff to present expert testimony by a physician as to the standard of care, and, absent such testimony, defendant is entitled to a directed verdict. See, e.g., Reinhardt v. Colton, 337 N.W.2d 88 (Minn. 1983). But see Harris v. Groth, 99 Wash. 2d 438, 451, 663 P.2d 113, 120 (1983) (expert testimony may be provided by qualified non-physician since "license to practice medicine, while important, is only one factor to be considered").

^{85. 466} So. 2d. 856 (Miss. 1985).

^{86.} Id. at 871.

^{87.} Id. at 872.

^{88.} Helling v. Carey, 83 Wash. 2d 514, 519 P.2d 981 (1974). In this well-known case, the defendant ophthalmologist was found liable for failing to administer an intraocular pressure test for glaucoma to a patient well under 40 years of age. The standard of the profession

tice, however, is usually held to be below acceptable practice levels, unless the defendant can invoke an exception.

The resource component in *Hall* requires consideration of the facilities, staff, services, and other equipment available to the practitioner in the institution. This follows the general recognition that courts should take into account the locality, availability of facilities, the nature of the practice, and the proximity of specialists and special facilities. This standard of care is a fluid average rather than the best available technology. It reflects those "medical procedures that have occurred with sufficient regularity in the past to become unmistakably etched into the practice of the profession."

Some critics have objected to this, suggesting instead that the standard should reflect practices approved by the leaders of the profession in order to encourage standards that are state-of-the-art in diagnosis and treatment. Even without common use in practice, medical conduct might then be evaluated against sound professional practice on the basis of current medical research as to the "best practice." However, such criticism fails to reflect the downside risk of the so-called "best practice" standard, especially with respect to high variation procedures described by Wennberg. What the leaders do may be expensive, of unproven efficacy, or harmful. The studies of medical practice variation demonstrate the lack of sufficient information to justify many procedures and tools.

2. Exceptions to the "Customary Practice" Standard

Courts have allowed doctors to deviate from customary practice under a variety of conditions.

a. Respectable Minority Rule. This doctrine allows for variation in clinical judgment, holding that "a physician does not incur liability merely by electing to pursue one of several recognized courses of treatment." Distinctive practices must be supported by at least a respectable minority within the professional group to allow the judge to direct a verdict rather than leave the question for

of ophthalmology did not require the giving of a routine pressure test to persons under age 40. See infra notes 162-72 and accompanying text.

^{89.} See Blair v. Eblen, 461 S.W.2d 370, 373 (Ky. 1970).

^{90.} See King, In Search of a Standard of Care for the Medical Profession: The "Accepted Practice" Formula, 28 VAND. L. REV. 1213, 1237 (1975).

^{91.} See id. Cf. Chumbler v. McClure, 505 F.2d 489, 492 (6th Cir. 1974) (standard not determined "solely by a plebiscite").

^{92.} See supra notes 57, 62-63 and accompanying text.

^{93.} Downer v. Veilleux, 322 A.2d 82, 87 (Me. 1974) (citation omitted).

the jury to resolve based upon the conflicting testimony of the proponents of the two opinions.⁹⁴ In the typical case, the minority approach is followed by at least a few doctors, and is the "best available" for a certain problem.⁹⁵

b. The Best Judgment Rule. Courts often accord physicians some latitude in the clinical setting, using the rubric of the physician's "best judgment." So long as the profession recognizes a difference of opinion as to a mode of diagnosis or treatment, "a physician who uses his own best judgment cannot be convicted of negligence, even though it may afterward develop that he was mistaken." Courts speak vaguely of room for the exercise of good medical judgment. This may mean that a doctor, concerned about the risks of a particular treatment, was conservative and did not treat. The doctor could attempt to present a reasoned defense of his treatment decision to either reject the standard of care, or to show that the standard was not clear and unanimous.

This does not mean that the "error in judgment" makes judgment an easily invoked shield against liability. The defendant must still have made a choice within the realm of the reasonable in terms of medical judgment.⁹⁹ It is therefore actually a subset of the respectable minority rule in recognizing that the choice, even if damaging to the patient in retrospect, was acceptable at the time made.¹⁰⁰

^{94.} See Hamilton v. Hardy, 37 Colo. App. 375, 549 P.2d 1099 (1976). In one case recognizing the respectable minority rule, the minority, of which the defendant was a part, consisted only of himself, which hardly seems "respectable." Chumbler v. McClure, 505 F.2d 489 (6th Cir. 1974).

^{95.} See Leech v. Bralliar, 275 F. Supp. 897 (D. Ariz. 1967) (sixty-five doctors in country used prolotherapy for whiplash with claimed eighty-five percent success rate; defendant held liable because he varied the treatment and therefore became a minority of one within the respectable minority).

Snyder v. St. Louis Sw. Ry., 228 Mo. App. 626, 640, 72 S.W.2d 504, 512 (1934) (quoting Judge Cox, Bailey v. Railroad, 296 S.W. 477, 479 (Mo. Ct. App. 1934) (citations omitted)).

^{97.} See Hall v. Hilbun, 466 So. 2d 856 (Miss. 1985).

^{98.} See, e.g., Haase v. Garfinkel, 418 S.W.2d 108 (Mo. 1967) (refusal of doctor to use anticoagulants for coronary artery disease in light of their risks to the patient and fact that no medication would prolong life in coronary heart disease).

^{99.} See, e.g., Logan v. Greenwich Hosp. Ass'n, 191 Conn. 282, 299, 465 A.2d 294, 303 (1983); Spike v. Sellett, 102 Ill. App. 3d 270, 273, 430 N.E.2d 597, 600 (1981) ("If a doctor has given a plaintiff the benefit of his best judgment, assuming that judgment to be equal to that ordinarily used by reasonably well-qualified doctors in similar cases, he is not liable for negligence, even if that judgment is erroneous.").

^{100.} See Roberts v. Tardif, 417 A.2d 444, 448-49 (Me. 1980) ("A doctor is not liable for injury resulting when he pursues one of several acceptable courses of treatment meeting the

c. Clinical Innovation. The best judgment exception is related to the situation in which the doctor chooses a new approach. Courts have been willing to allow innovation while distinguishing it from experimentation. Where the established techniques pose risks to the particular patient, courts have held it permissible to attempt "therapeutic innovation," if the doctor reasonably calculated that the innovation would accomplish the same goal as the customary practice. ¹⁰¹ This exception thus seems to reflect judicial recognition of patient variation, ¹⁰² legitimating unproven approaches when the particular patient fails to respond to more "standard," customary treatments. It is particularly apt when the treatment is a desperate attempt to save a patient from predictable and imminent death or deterioration. ¹⁰³

3. The Hospital

When a patient is injured by an agent or instrumentality of the hospital, or a claim is made that the hospital's equipment was deficient or missing, the hospital must be compared to a standard in determining tort liability. The standard may be another hospital of the same size and resources in the same locality or in a similar locality. It may reflect the national average or simply a "reasonable hospital" standard. Most courts apply a standard which reflects both the baseline of practice required for Joint Commission on the Accreditation of Hospitals (JCAH) accreditation and a resource-sensitive component which takes into account the hospital's size and resources.

a. Minimum National Standards. The application of JCAH national accreditation standards has doomed the locality rule as applied to hospitals. The test is now monolithic: that degree of skill which is expected of a reasonably competent hospital in the same or similar circumstances. As in cases brought against physicians, advances in the profession, availability of special facilities and special-

applicable standard of care in the circumstances, even though an alternative procedure also meeting that standard might have avoided the injury."); Miller v. Scholl, 594 S.W.2d 324 (Mo. Ct. App. 1980) (failure of ophthalmologist to use procedure of phacoemulsification not negligent, since in "cradle stage of use and required a 'rather elaborate' piece of equipment" not available in the area); see also J. KING, THE LAW OF MEDICAL MALPRACTICE 69-70 (2d ed. 1986) (citing Cebula v. Berroit, 652 S.W.2d 304 (Mo. Ct. App. 1983)).

^{101.} See, e.g., Brook v. St. John's Hickey Memorial Hosp., 380 N.E.2d 72 (Ind. 1978).

^{102.} See supra notes 72-73 and accompanying text.

^{103.} See, e.g., Karp v. Cooley, 493 F.2d 408 (5th Cir. 1974) (the experiment was therapeutic in intention, to be judged by traditional malpractice evidentiary standards).

ists, together with all other relevant considerations, are to be taken into account.¹⁰⁴

b. Service and Equipment Shortfalls. A hospital is generally not liable for a failure to utilize the latest technology. As the court stated in Emory University v. Porter:

A hospital owes to its patients only the duty of exercising ordinary care to furnish equipment and facilities reasonably suited to the uses intended and such as are in general use under the same, or similar, circumstances in hospitals in the area It is not required to furnish the latest or best appliances, or to incorporate in existing equipment the latest inventions or improvements even though such devices may make the equipment safer to use. ¹⁰⁵

So long as the equipment was widely accepted, generally used, and functioned as designed, more modern equipment is not necessary to avoid liability. Leven if a tool, such as the expensive CT scanner, has come into common use, a smaller and less affluent hospital can argue that it should be judged by the standards of similar hospitals with similar resources. This differential standard, reflecting resource variation between hospitals, protects a hospital in a situation where expensive devices would threaten its financial solvency. However, if an institution lacks a piece of equipment which has come to be recognized as valuable, particularly for diagnosis, it may have a duty to transfer the patient to an institution which does have such equipment. Los

This generous judicial allowance for older equipment by some courts is now confronting the strict liability arguments imported

^{104.} Shilkret v. Annapolis Emergency Hosp. Ass'n, 276 Md. 187, 349 A.2d 245 (1975). As to the JCAH baseline, see generally Jost, *The Joint Commission on Accreditation of Hospitals: Private Regulation of Health Care and the Public Interest* 24 B.C.L. Rev. 835 (1983); Dickinson v. Mailliard, 175 N.W.2d 588 (Iowa 1970).

^{105. 103} Ga. App. 752, 755, 120 S.E.2d 668, 670 (1961); accord, Starnes v. Charlotte-Mecklenburg Hosp. Auth., 28 N.C. App. 418, 221 S.E.2d 733 (1976).

^{106.} See Lauro v. Travelers Ins. Co., 261 So.2d 261 (La. Ct. App. 1972).

^{107.} A small rural hospital or a poor urban one may not be able to escape liability altogether, however. Companies such as Diagnostek now transport portable scanning units from hospital to hospital, particularly in rural areas, on a scheduled basis. A hospital that fails to schedule patients that might benefit from a scan could then be liable for a diagnostic shortfall that results in patient illness that could have been treated with a proper early diagnosis.

^{108.} In Blake v. D.C., No. 2623-80, slip op. (D.C. Super. Ct., June 30, 1981), a trial court allowed a case to go to the jury where the plaintiff's estate claimed that she died because of the hospital's failure to own a CT scanner to diagnose her condition. The hospital lacked the scanner because of cost-based rationing imposed by controls on the hospital's capital expenditures. The court instructed the jury regarding the duty to transfer in such circumstances. The case is discussed in Mehlman, Rationing Expensive Lifesaving Medical Treatments, 1985 Wis. L. Rev. 239, 287.

from product defect litigation. Since so much of medicine relies on medical devices, courts have in some cases applied product liability concepts. Section 402A of the Restatement (Second) of Torts was invoked in Grubb v. Albert Einstein Medical Center, 109 involving a defective plug cutter. The court's language reflects the increasingly central role of the hospital in the delivery of medical services: "[I]f a hospital supplies equipment to an operating physician the hospital must appraise themselves of the risks involved and adopt every effort to insure the safety of the equipment chosen." 110

Other courts have applied implied warranty principles drawn from the Uniform Commercial Code, again using a strict liability approach in effect.¹¹¹ Many of the *res ipsa loquitur* cases involve the failure of medical devices during surgery, and in effect are imposing strict liability under the guise of the *res ipsa* doctrine.¹¹² The standard regarding equipment thus is twofold: while a hospital need not have the newest equipment, so long as its equipment is used by other similarly situated hospitals, any defects in the equipment which result in patient injury may also result in a strict liability standard in future cases.

c. Minimum Facility and Support Requirements. Inadequate facilities or lack of support have led courts to impose liability on hospitals and clinics. Thus, a hospital must be equipped and prepared to treat the range of problems and side effects attendant to procedures they offer. In Hernandez v. Smith 113 an obstetrical clinic lacked surgical facilities for Cesarean sections and was liable for "the failure to provide proper and safe instrumentalities for the treatment of ailments it undertakes to treat . . . "114

Inadequate staffing has been rejected as a defense, at least when the available staff could have been juggled to achieve close supervision of a problem patient.¹¹⁵ Some decisions have suggested that a

^{109. 255} Pa. Super. 381, 387 A.2d 480 (1978).

^{110.} Id. at 401, 387 A.2d at 490.

^{111.} See, e.g., Skelton v. Druid City Hosp. Bd., 459 So. 2d 818 (Ala. 1984) (liability where suture needle broke off during surgery).

^{112.} See, e.g., Anderson v. Somberg, 67 N.J. 291, 338 A.2d 1 (N.J. 1975) (court shifted burden of proof to defendants to exonerate themselves in case involving defective surgical tool).

^{113. 552} F.2d 142 (5th Cir. 1977).

^{114.} Id. at 144 (quoting Medical & Surgical Memorial Hosp. v. Cauthern, 229 S.W.2d 932, 934 (Tex. Civ. App. 1949); see also Valdez v. Lyman-Roberts Hosp., 638 S.W.2d 111 (Tex. Ct. App. 1982) (obstetrics unit could not handle ruptured uterus).

^{115.} See, e.g., Horton v. Niagara Falls Memorial Med. Center, 51 A.D.2d 152, 380 N.Y.S.2d 116 (1976).

medical facility may narrow the scope of its obligations by informing the patient of its limitations. This will be a very narrow defense, however, since the institution must comply with minimum standards for accreditation and must comport with the standard of care of hospitals with similar resources.

The centrality of institutional delivery of health care has prompted courts to expand vicarious liability doctrine to cover the negligent acts of doctors, even when they are independent contractors. The next step, direct corporate liability for medical errors attributable to staff, has been taken in some jurisdictions. Having accepted enterprise liability arguments in other spheres, the judicial move from vicarious liability to direct liability is a short step. Thus, hospitals have been held directly responsible for incompetence in their medical staff, if it should have detected the incompetence at the time of initial appointment, during peer review, or at the time of contract or privileges renewal. This has even been extended in a recent case to impose the obligation on a hospital, as opposed to the doctor, to procure a patient's informed consent.

Strict liability has also been recognized as a cause of action in a case involving hospital services rather than equipment. In *Johnson v. Sears, Roebuck and Co.*, ¹²⁰ the court ruled that mechanical and administrative services provided by hospitals should not be exempt from strict liability as a matter of law. "[I]t is in the public interest that those services which hospitals perform for both doctors and patients be performed properly." ¹²¹

What is emerging is a differential standard of care under which hospitals are subjected to increasing scrutiny for the services they render, including the furnishing of equipment, personnel, and most important, medical care. As hospitals and alternative site providers assume increased responsibilities, including supplying complex technologies of diagnosis and treatment, middle-level managers to

^{116.} See, e.g., Hernandez v. Smith, 552 F.2d 142 (5th Cir. 1977). Cf. Wilmington Gen. Hosp. v. Manlove, 54 Del. 10, 15, 174 A.2d 135, 140 (1961) (liability for refusal to treat in an emergency "if the patient has relied upon a well-established custom of the hospital to render aid").

^{117.} See, e.g., Beeck v. Tucson Gen. Hosp., 18 Ariz. App. 165, 500 P.2d 1153 (1972).

^{118.} See, e.g., Darling v. Charleston Community Memorial Hosp., 33 Ill.2d 326, 211 N.E.2d 253 (1965), cert. denied, 383 U.S. 946 (1966); Pedroza v. Bryant, 101 Wash. 2d 226, 677 P.2d 166 (1984); Elam v. College Park Hosp., 132 Cal. App. 3d 332, 183 Cal. Rptr. 156 (1982). For a general discussion, see Peters & Peraino, Malpractice in Hospitals: Ten Theories for Direct Liability, 12 LAW, MED. & HEALTH CARE 254 (1984).

^{119.} Magana v. Elie, 108 Ill. App. 3d 1028, 1029, 439 N.E.2d 1319, 1320 (1982).

^{120. 355} F. Supp. 1065 (E.D. Wis. 1973).

^{121.} Id. at 1067.

monitor treatment costs, and utilization-review managers to balance doctor wishes against cost constraints, they are raising the standard against which institutional conduct will be judged.¹²²

Can a hospital successfully defend against a suit in which the patient claims that he was injured by a cost-cutting decision, implemented by the doctor in response to institutional incentives? The incentive systems supply only indirect pressure, and no hospital imposes specific treatment guidelines. The hospital might therefore try to argue that clinical decisionmaking responsibility lies only with the doctor, as it always has. This argument is not likely to be successful in the current judicial climate.

Suppose the doctor engages in expensive, contraindicated diagnostic testing and treatment. Suppose further that he thereby generates cascade effects in his patients because of false positive test results and the iatrogenic effects of treatment and surgery. A patient who is injured by the actions of this doctor would have a difficult time proving negligence, given the variation which surrounds many treatment approaches and the defense of best judgment. On the other hand, the hospital undertakes utilization review, peer review, and systematic audits of staff performance for both quality and cost control. If the pattern of iatrogenesis emerges from an audit of the doctor's records, then the hospital should be liable in negligence for failing to rescind or reduce his staff privileges. 123

4. Tort Duties: Recurring Situations

a. The Duty of Nonabandonment. The doctor-patient relationship, which is a contractual one with a fiduciary component, can be terminated by mutual agreement or by the patient unilaterally. The general rule regarding abandonment is that one who engages a doctor or hospital for treatment implicitly engages such services for the duration of the illness, or until the services are no longer needed. Abandonment occurs when the physician refuses to continue treatment because of the patient's inability to pay, or when the doctor

^{122.} See Marsh, Health Care Cost Containment and the Duty to Treat, 6 J. LEGAL MED. 157, 173 (1985):

It is highly unlikely that any hospital in the future will be permitted to insulate itself from liability by arguing in favor of the traditional independence of the physician-patient relationship, while at the same time instituting specific DRG "treatment and discharge" time frames, standardized testing procedures, and other compelling cost saving measures.

^{123.} See Knapp v. Palos Community Hosp., 125 Ill. App. 3d 244, 465 N.E.2d 554 (1984); cf. supra note 11 and accompanying text.

fails to discover and treat the patient's illness. 124 Refusal to pay has not been recognized as a defense to the charge of abandonment. 125

The role of standards defined by outside organizations such as JCAH are increasingly important in addressing abandonment concerns. The current JCAH manual states that "[i]ndividuals shall be accorded impartial access to treatment or accommodations that are available or medically indicated, regardless of race, creed, sex, national origin, or sources of payment for care." This standard, along with state policies that complement it, are cited with approval in *Thompson v. Sun City Community Hosp., Inc.*, 128 where the court held that reasonable cause for patient transfer must be based on medical considerations, "not economic considerations relevant to the welfare of the hospital." The theory of liability is therefore in place; what is needed are both plaintiffs willing to sue and lawyers with sufficient incentives to take the cases.

b. The Duty to Terminate Treatment. A duty to terminate treatment may be found when the treatment is ineffective or dangerous. A doctor has a duty to act in good faith toward her patient, informing him when a method of treatment is of no benefit. This includes a duty to advise a patient to consult a specialist or one who might furnish better treatment when the doctor knows or should know that her treatment is not providing relief or effecting a cure. 131

Entin describes the situation where the perverse incentives of the DRG system can tempt a hospital to retain a patient for treatment to enhance reimbursement.¹³² While DRG standards will

^{124.} See, e.g., Ascher v. Gutierrez, 533 F.2d 1235 (D.C. Cir. 1976); Ricks v. Budge, 91 Utah 307, 64 P.2d 208 (1937); Gray v. Davidson, 15 Wash. 2d 257, 130 P.2d 341 (1942).

^{125.} See, e.g., Meiselman v. Crown Heights Hosp., 285 N.Y. 389, 34 N.E.2d 367 (1941). See generally Comment, The Action of Abandonment in Medical Malpractice Litigation, 36 Tul. L. Rev. 834 (1962).

^{126.} See generally Olender, Breach of Consumer Standards: Violations May Lead to Medical Negligence, 22 TRIAL 39 (Apr. 1986).

^{127.} Joint Commission on Accreditation of Hospitals, Accreditation Manual for Hospitals 1986 xi (1985).

^{128. 141} Ariz. 597, 688 P.2d 605 (1984).

^{129.} Id. at 606, 688 P.2d at 611.

^{130.} See Annot., 35 A.L.R. 3d 349 (1971).

^{131.} See, e.g., Ison v. McFall, 55 Tenn. App. 326, 400 S.W.2d 243 (1964); Larsen v. Yelle, 246 N.W.2d 841 (Minn. 1976) (physician in general practice liable for failing to refer patient with fractured wrist to orthopedic specialist). See generally PRINCIPLES OF MEDICAL ETHICS OF THE AMERICAN MEDICAL ASSOCIATION § 8 (requiring doctor to seek consultation "whenever it appears that the quality of medical services may be enhanced thereby").

^{132.} See Entin, DRGs, HMOs, and PPOs: Introducing Economic Issues in the Medical

likely be amended over time to correct such disincentives, the tort theory of failure to refer provides a useful transitional argument when injury is due to inadequate treatment or facilities.

c. The Duty to Obtain Informed Consent. A doctor must disclose information material to a patient's decision and ensure that the patient understands the risks of both the proposed test or treatment and any alternatives. Informed consent doctrine varies substantially among the states, with half the states controlling its operation by statute. ¹³³ In the few cases which get to the jury, the plaintiff often loses at trial ¹³⁴ or has a verdict overturned on appeal. ¹³⁵

In the cost-containment environment, informed consent doctrine has been seen as a way of constructing a shield against liability for the doctor who makes a clinical rationing decision. Informing a patient of the reasons for nontreatment—primarily, the lack of resources to cover the cost of a treatment which would otherwise be required—may absolve liability, some would argue. But such an approach is a troublesome solution. Many poor or elderly patients, given the choice of nontreatment or referral to another institution where they must pay out of pocket, will forego treatment. Allowing the doctor, and therefore the institution, off the hook in this manner provides too easy an escape from pressures toward efficient medical practice and reduction of iatrogenic effects. In the long run, dumping patients through the informed consent pathway will cost society more in aftercare costs because of delayed or denied treatment. As Mariner writes:

[T]he use of informed consent to convert medical decision making into economic decision making seems wholly misplaced, a variation of blaming the victim. Patients have the right to con-

Malpractice Case, 20 FORUM 674 (1985). Entin discusses the distinction made under prospective payment between discharges and transfers. A transferring hospital is paid a perdiem rate, while the final discharging hospital is paid at the full rate. A transferring hospital cannot obtain outside reimbursement for excessive cost or length of stay. He notes:

This puts a heavy burden on the transferring hospital since the costs associated with a hospital admission are usually much greater during the first days of admission, when the bulk of the testing and other more expensive care is delivered. Thus, there is an incentive to resist discharges and transfers when the per-diem rate will obviously provide inadequate reimbursement. In order to avoid a financial loss, providers may unwisely try to continue to treat the patient in facilities that are not as adequately suited to the care and treatment of a particular ailment.

Id. at 677.

^{133.} See generally LeBlang, Informed Consent—Duty and Causation: A Survey of Current Developments, 18 FORUM 280 (1983).

^{134.} See, e.g., Wheeldon v. Madison, 374 N.W.2d 367 (S.D. 1985).

^{135.} See, e.g., Precourt v. Frederick, 395 Mass. 689, 481 N.E.2d 1144 (1985).

sider the costs of their care, but the burden of solving the economic crisis of the health care system cannot be placed upon their shoulders alone, just as it should not be placed on the shoulders of their physicians. 136

C. Risks of Suit: Stretching Doctrine and Reshaping Process

A series of case studies, capturing the range of cost-sensitive contexts in which health care is currently being delivered, illuminates the interplay between medical decisionmaking sensitive to cost constraints and the risk of a tort suit. The following five cases present iatrogenic results linked to cost-sensitive decisions. The legal response to these situations must be analyzed at two levels. First, what is the likely legal outcome for the injured plaintiff, given the current state of tort doctrine? Second, what refinements in tort law and practice might be considered to facilitate a better response to these situations?

1. The HMO System

The patient, a man in his late thirties, is diagnosed during a routine physical as having a potentially life-threatening heart arrhythmia. The patient is treated with a combination of diisopyramide and propranolol, with no side effects. After five years, the man moves and joins an HMO. The HMO cardiologist notes that propranolol could have been tried alone, even though it presented a small chance of a fatal heart attack. He also notes that diisopyramide costs \$430 per year; the propranolol costs \$26. Even a significant increase in the propranolol dosage, involving little risk, would cut the HMO cost by several hundred dollars if prescribed without the diisopyramide. 137

If the patient suffers a heart attack and dies, can the HMO avoid liability by citing its cost-saving choice?

Provider sensitivity to cost is enhanced in the HMO or preferred provider organization (PPO) situation. The definition of medical necessity therefore becomes critical, with HMOs struggling to de-

^{136.} Mariner, Diagnosis Related Groups: Evading Social Responsibility?, 12 LAW, MED. & HEALTH CARE 243, 244 (1984).

^{137.} This case is drawn from Veatch & Collen, *The HMO Physician's Duty to Cut Costs*, 15 HASTINGS CENTER REP., Aug. 1985, at 13.

^{138.} One must be careful here in lumping all HMOs together. They vary widely in design and in incentive structure, and their litigation experience also varies widely. The author surveyed settled cases as described in the AMERICAN TRIAL LAWYERS ASSOCIATION LAW REPORT over the past year (an admittedly unscientific data base). HMOs were named as defendants, and paid out substantial sums, in several of the reported settlements.

velop norms for admissions, lengths of stay, specialty referral, and diagnosis and treatment alternatives. Justification for reduced levels of care must be based not merely on cost considerations, but rather on both cost and medical considerations. ¹³⁹

Two lines of defense in the posited case are possible. The first is to judge the HMO by the standards of other HMOs, arguing that a similar practice is common among HMOs. Tort law would operate as a multifaceted mirror, reflecting different standards in different delivery settings. No cases can be found in the appellate records to analyze judicial reactions to HMOs, which may suggest that injured plaintiffs are avoiding suits for other reasons. The theoretical judicial question, however, is the proper weight to give the customary practice: conclusive weight versus only some evidence? Given the uncertainty at present as to the quality of care provided in terms of the balance between patient risk and money saved, courts are likely, if they adopt a separate HMO standard, to treat it only as some evidence rather than conclusive. This is probably a desirable perspective until further evidence is available.

A second line of tort defense is to use the doctor as a guide to the system who introduces the patient at the time of entry to HMO cost constraints, explaining the capitation system. At the time of the drug choice, the specifics should also be discussed with the patient, since the difference in risks in the two drugs, while small, might be material to the patient (or to a "reasonable patient," in the language of most courts). Such a discussion would be essential to avoid an informed consent count.¹⁴⁰

2. The DRG World

One of four staff obstetricians in a hospital performs many fewer Cesarean sections than does his colleagues. He feels that most women who have had a Cesarean section can have a normal vaginal delivery with their second child, citing studies which find no differences in outcomes for the different delivery modes. The medical director feels that the tradition of repeat Cesareans is strong and that more research is needed before obstetric practice changes. He

^{139.} See Entin, supra note 132, at 674.

^{140.} For arguments in favor of differential standards of care applicable to HMOs, see Curran & Moseley, The Malpractice Experience of Health Maintenance Organizations, 70 Nw. U.L. Rev. 69 (1975); Bovbjerg, The Medical Malpractice Standard of Care: HMOs and Customary Practice, 1975 DUKE L.J. 1375; Havighurst & Bovbjerg, Professional Standards Review Organizations and Health Maintenance Organizations: Are They Compatible?, 1975 UTAH L. Rev. 375.

also notes that the hospital is losing money on each of the doctor's previous Cesarean section patients which delivers vaginally with a subsequent pregnancy.¹⁴¹

If a patient has problems with a vaginal delivery following a Cesarean section, delivering a brain-damaged infant, can she sue?

The doctor could defend on two bases to a malpractice suit. First, he could argue that the standard of care reflects substantial variation and that he was following a respectable minority practice. He could either call supporting medical witnesses or, as a second best option, introduce medical research in treatises or journals which supports his approach. Modern rules of evidence in most states allow substantive use of treatises in the absence of expert witness support. 142 If obstetric practice is still largely unanimous as to repeat Cesarean sections with second deliveries, however, the doctor is at risk in a jurisdiction which treats standard practice as conclusive, with the respectable minority exception requiring expert testimony as to a distinct subgroup of practice. 143 The desirable judicial posture in this situation is to allow academic evidence with respect to the effects and risks of both practices, allowing the doctor a chance to argue that his position is an emerging respectable minority, even if he is alone in his stand.

Second, as with the HMO case, the doctor needs to inform the patient of the risks and benefits of the various treatment choices in order to avoid the risk of a count on informed consent. Unlike the case where informed consent is used to shield the physician from liability for a cost-related decision, this is a legitimate case for the operation of the informed consent shield; the decision is fundamentally a medical one with substantial benefits for the mother in avoiding another Cesarean section.

3. Discharge or Abandonment

A woman experiencing back pain is referred by her physician to a vascular surgeon who diagnoses Leriche's syndrome, a vascular

^{141.} See Wasserman, The Doctor, the Patient, and the DRG, 13 HASTINGS CENTER REP., Oct. 1983, at 23.

^{142.} See generally FED. R. EVID. 803(18). Learned treatises are admissible [t]o the extent called to the attention of an expert witness upon cross-examination or relied upon by him in direct examination, statements contained in published treatises, periodicals, or pamphlets on a subject of history, medicine, or other science or art, established as a reliable authority by the testimony or admission of the witness or by other expert testimony or by judicial notice. If admitted, the statements may be read into evidence but may not be received as exhibits.

^{143.} See Schwartz, Commentary: The Doctor, The Patient, and the DRG, 13 HASTINGS CENTER REP., Oct. 1983, at 24.

insufficiency. Surgery is performed in the hospital to correct the problem, and a few hours after surgery a thrombectomy is necessary because of a clot in the femoral artery. Six days later a right lumbar sympathectomy is performed, and physiotherapy is started to improve circulation to the right leg. The fiscal intermediary then indicates that the patient should be discharged after a four-day extension, although the treating doctors prefer extended hospitalization. After discharge, the patient's thrombus recurs in the right artery, and her leg is amputated to midthigh.¹⁴⁴

Does the patient have an action for her injury, and, if so, against whom?

Such a discharge, where injury results, justifies an abandonment cause of action. 145 The cost-risk tradeoff is sharply presented here, since the physicians feel that they are constrained by the utilization review forces. How to handle the problem? First, the doctor has an obligation to talk with the audit reviewer and to exhaust procedures, discussing with the consulting physician the need for extended hospitalization in this particular case. Second, the doctor should discuss the problem with the patient so that he is aware of the dispute over the hospitalization or treatment. Third, if the dispute is not resolved, and the doctor discharges the patient, the institution, and perhaps the doctor, may be liable for breach of the duty of nonabandonment, or at least breach of the duty to refer the patient to an outpatient facility. Liability may even be imposed on the third party utilization review body, increasingly perceived as the appropriate target for cost-sensitive decisions which result in medical error. 146 Utilization review is new but rapidly expanding, and liability for the denial of coverage of benefits can be predicted in other situations resembling the posited case. If the audit organization fails to properly select or consult with its physician consultants, this can lead to liability. 147 If the hospital "decides" through its admin-

^{144.} This is a variation on the *Wickline* case in California, where a jury returned a verdict of \$500,000 against the state of California for the acts of a nurse and a physician consultant working for the Medi-Cal program. *See* Carlova, *A Jury Lands a \$500,000 Haymaker on Health Bureaucrats*, 60 MED. ECON., May 16, 1983, at 80. In the subsequent appellate decision, the court held that the doctor should have done more: "[T]he physician who complies without protest with the limitations imposed by a third party payor, when his medical judgment dictates otherwise, cannot avoid his ultimate responsibility for his patient's care." Wickline v. State, 228 Cal. Rptr. 661, 671 (Cal. App. 2 Dist. 1986).

^{145.} See, e.g., Kekua v. Kaiser Found. Hosp., 61 Hawaii 208, 601 P.2d 364 (1979).

^{146.} See Wickline, 228 Cal. Rptr. at 671.

^{147.} See, e.g., Aetna Life Ins. v. Lavoie, 470 So. 2d 1060 (Ala. 1984) (punitive damage award of \$3,500,000 based on a finding that the insurer made a bad faith denial of the insured claim).

istrative procedures to reject the treating physician's recommendation regarding hospitalization, liability can also be predicated on a direct corporate negligence theory.

4. Referral Forces

A doctor examines a boy brought into the emergency room of a small community hospital after an auto accident with an injured leg and foot. The X-ray suggests a dislocated foot. The doctor can either try to reduce the dislocation in the hospital, or the boy can go to an orthopedic specialist in a large city 110 miles away. Treatment in the community hospital generates a fee for the doctor, while referral does not.¹⁴⁸ The doctor chooses to treat, and the boy's foot is permanently injured as the result of the doctor's inexpert treatment.

Can suit be successfully brought?

This presents a problem that has always troubled medical practice. A doctor is expected to know the limits of his training and resist the siren song of income when he is faced with a problem which he is only marginally competent to treat. The context is cost and income sensitive, but no more so than has always characterized the practice of medicine.

5. Dumping

A man is brought into the emergency room of a suburban hospital with multiple stab wounds and a concussion. The hospital quickly determines that the man lacks insurance and is not eligible for further Medicaid funds. The hospital administrator urges transfer to the urban public hospital, a two hour drive away. The delay in transporting the man results in his death due to the head trauma.

Can the transferring hospital be held liable for failing to diagnose and stabilize the man's condition?

Hospitals have been dumping in large numbers in a struggle to contain their costs by avoiding uninsured patients. Yet the duty of nonabandonment, coupled with existing JCAH standards, provides ample doctrinal support for an action by an injured patient who suffers as the result of being transferred or dumped. Courts have been extremely hostile to patient transfers, but hospitals persist in

^{148.} The basic situation is taken from the essay by Hilfiker, *Facing Our Mistakes*, 310 NEW ENG. J. MED. 118, 119 (1984). Hilfiker did not intend the example to illustrate a cost incentive problem.

^{149.} See A. HOLDER, MEDICAL MALPRACTICE LAW 47 (1975).

such transfers in large numbers. Hospitals pragmatically estimate that the costs of potential malpractice suits are outweighed by the costs of retaining uninsured or underinsured patients.¹⁵⁰

Such a balancing of tort risks and treatment decisions leads to consideration of the tort process, as opposed to tort doctrine, in affecting malpractice risk in the face of cost constraints.

D. The Tort Process: Filtering Out the Poor

The argument is simple. Hospitals believe the calculated risk of incurring a malpractice suit to be low. They therefore continue questionable practices, such as transferring uninsured patients. Lawyers who operate on a contingency fee basis do not find suits on behalf of poor or elderly patients financially rewarding. The higher incidence of preexisting medical problems in these patients makes proof of causation difficult, and their reduced or nonexistent earning capacity and short life expectancy reduce recoverable damages if causation can be proved.¹⁵¹

The applicable standard of care is straightforward in many of these negligent transfers cases. If the patient's condition has not stabilized at the time of transfer, and the transferring hospital undertook some treatment, then abandonment is an available theory. Informed consent requirements contained in the American Hospital Association's Patient's Bill of Rights require disclosure of the reasons for, and alternatives to, transfer. 152

The problem of reduced recoverable damages is real because the elderly or the poor have little earning power, the standard measure for damages. The pattern that is emerging in nursing home litigation is relevant to this problem—pain and suffering is a major com-

^{150.} See Schiff, Ansell, Schlosser, Idris, Morrison & Whitman, Transfers to a Public Hospital: A Prospective Study of 467 Patients, 314 New Eng. J. Med. 552 (1986). The authors found that "many patients are in a medically unstable condition at the time of transfer. . . ."

They concluded that this raised

serious questions about the private health sector's ability to consider the condition and well-being of patients objectively, given the strong economic incentives to transfer the uninsured. The delay in providing needed medical services as a result of the transfer process represents a serious limitation of the access to and quality of health care for the poor.

Id. at 556.

^{151.} See Kapp, supra note 23, at 249 ("The mechanics of the legal system itself—quite apart from the merit of any specific claim—will likely serve as the most influential brake on the use of malpractice litigation to enforce standards of quality care in the wake of DRG-motivated rationing."). Cf. Rosenblatt, Rationing "Normal" Health Care: The Hidden Legal Issues, 59 Tex. L. Rev. 1401, 1415-16 (1981).

^{152.} AMERICAN HOSP. ASS'N, PATIENT'S BILL OF RIGHTS (1975), cited in Schiff, supra note 149, at 556.

ponent of the awards, which have ranged from \$50,000 to \$1.35 million.¹⁵³ This is true even though the elderly nursing home resident is old, frail, and has multiple maladies. Experienced litigators on behalf of the elderly suggest arguing to the jury that the defendants have interfered with the small but precious bit of life left to the plaintiff.¹⁵⁴

This line of argument is consistent with the emerging "loss of a chance" doctrine of causation. Under this theory, the plaintiff may introduce evidence attempting to demonstrate that there was a probable reduction in the statistical chance for survival, even though it cannot be proven that with timely treatment the plaintiff could have lived to his normal life expectancy. In Herskovits v. Group Health Cooperative of Puget Sound, 155 the plaintiff's chances of survival from lung cancer were reduced from an estimated thirty-nine percent to twenty-five percent as the result of failure by the hospital and doctor to promptly diagnose the cancer. The trier of fact was allowed to weigh this "loss of a chance" in deciding whether the evidence of increased risk caused the injury or death of the plaintiff. 156

A failure by a hospital to stabilize a patient before transfer may lead to liability. In *Valdez v. Lyman-Roberts Hosp., Inc.*, ¹⁵⁷ the court was receptive to "loss of a chance" arguments in the dumping context. The court's language is full of anger:

Even if it be assumed that her chances for recovery were remote, the hospital would still be liable for depriving her of any chance she might have had. The burning candle of life is such a precious light in anyone's existence that no one has a right to extinguish it before it flickers out into perpetual darkness and oblivion Therefore, if the appellee hospitals accelerated Juanita Valdez' death by even an hour, minutes, or seconds, they could be

^{153.} See Nemore, Protecting Nursing-Home Residents: Tort Actors Are One Way, 21 TRIAL, Dec. 1985, at 54.

^{154.} See id. at 88 (footnote omitted).

^{155. 99} Wash. 2d 609, 664 P.2d 474 (1983).

^{156.} For the initial statement of the argument, see King, Causation, Valuation, and Chance In Personal Injury Torts Involving Preexisting Conditions and Future Consequences, 90 YALE L.J. 1353 (1981); Note, Increased Risk of Harm: A New Standard for Sufficiency of Evidence of Causation in Medical Malpractice Cases, 65 B.U.L. Rev. 275 (1985). See also Cullum v. Seifer, 1 Cal. App. 3d 20, 81 Cal. Rptr. 381 (1969) (evidence that prompt biopsy might have lengthened life or increased patient's comfort level sufficient for new trial); Monahan v. Weichert, 82 A.2d 102, 442 N.Y.S.2d 295 (1981) (even if acts merely speeded up a result which was inevitable, recovery allowed to the extent that negligence brought the condition on prematurely).

^{157. 638} S.W.2d 111 (Tex. Ct. App. 1982).

liable. 158

The tort process therefore possesses doctrinal tools available to whet the appetite of the personal injury lawyer in his search for plaintiffs. Nursing home litigation is on the increase, and dumping litigation cannot be far behind.

IV. THE DOCTOR'S DILEMMA

A. Cost Constraints as a Defense

The argument that cost constraints should be allowable as a defense in a malpractice action is attractive. It offers the anxious doctor the hope of defending herself when she has made a choice that saved money for the institution but resulted in patient injury. It also oversimplifies the problem by assuming that doctors do not factor in cost considerations at present. Yet cost-sensitive arguments have been accepted by the courts in a variety of ways: the aspect of standard of care which considers available resources; the best judgment rule (or error of judgment rule) with its substantial discretion; and informed consent doctrine.

Doctors and economists would like cost to be an explicit defense. Danzon argues that "the fact that social costs exceed expected benefits should be recognized as a defense against failure to take costly precautionary measures." The economist, sensitive to the consumption of resources by our health care system, wants to reduce the effect of malpractice rules which tend to encourage extreme measures of care, regardless of the cost and the marginal benefit of such care. The medical literature with respect to the cascade effect, iatrogenesis in hospitals and surgery, and medical practice variation points in the same general direction but diverges somewhat in focus. Balancing social cost with private benefit poses an ethical dilemma; reducing the economic costs of iatrogenesis focuses on a different component of the problem of medical cost.

The ethicist supports a cost-based defense in extreme cases. Where the doctor is caught between the powerful pressures of salary and status and the risk of suit, some ethicists suggest that she be able to rebut the argument of failure to conform to the standard of care by demonstrating fiscal constraints and lack of alternatives, leaving it to the jury to resolve the resource tradeoff between patient and society. Two arguments are given for recognizing this defense. First, its absence will frighten doctors into refusing to be cost con-

^{158.} Id. at 116.

^{159.} MEDICAL MALPRACTICE, supra note 17, at 223.

scious at all due to the risk of tort liability. Second, physicians' willingness to treat the poor will be chilled where insurance is lacking or Medicare or Medicaid entitlements are incomplete or exhausted. 160

Cost constraints should not be a defense to a medical malpractice suit for several reasons. First, the absence of such a defense is not likely to frighten doctors into refusing to be cost conscious. A variety of pressures would continue to encourage both cost and efficacy, including the institutional pressures inherent in the incentive systems discussed earlier, ¹⁶¹ as well as internal and external audits, from peer review to PRO audits.

Second, a cost-based defense allows explicit rationing of care, impacting on the poor most heavily. This effect would be all the more invidious due to its randomness, with the extent of rationing dependent upon the perspective of the individual physician and the particular institution. Trading off acceptable care for reduced expense, at the level of the individual patient, leaves the poor patient no recourse against medical error due to costcutting. Morreim has termed this "bedside budget cutting" and has effectively delineated its ethical limits. 162

Third, such a defense exculpates the doctor too easily. Rather, the appropriate action might be to change DRG allowances, to refine HMO criteria, to alter PPO incentives, or to battle the hospital administration. Doctors will remain in control of the gates to health care and, therefore, will continue to possess substantial autonomy. Medical passivity in the face of corporate and other cost containment pressures is neither desirable nor necessary. The goal in this process is to set standards which provide a minimum, effective level of care, and then to add disclosure to patients of the kinds of choices they have within the form of health care delivery system they have chosen.

Fourth, prohibitive cost as a defense naively suggests that the patient is ignorant of the choices made by the doctor. It also implies that the physician can be allowed to gamble with the patient's welfare without jeopardy to his own income and status. In the long run, this battle will be fought on other battlegrounds. In the meantime, there is no reason for a new tort defense to exacerbate

^{160.} See Morreim, Cost Constraints as a Malpractice Defense (in press, HASTINGS CENTER REP.).

^{161.} See supra notes 9-12 and accompanying text.

^{162.} See Morreim, supra note 12, at 36.

the conflicts over cost and medical necessity by creating an easy escape valve.

Finally, a cost-based defense deflects attention from the merits of explicit contracts between patients or groups of patients and providers, where such cost considerations can be taken into account in a systematic way and understood and accepted by patients. Certainly, the economists are correct in applauding the merits of the contract model for allowing a range of care choices for health care consumers, so long as the poor and uninformed are protected.¹⁶³

How can the tort system reduce the pressures on hospitals and doctors to abandon the poor, especially in light of the likely increased incidence of litigation as the poor suffer injury due to costsensitive decisions? And how can the tort system protect the "poor" hospital? Hospitals with severe resource limitations, such as small rural hospitals or large urban public hospitals, can raise those limitations as a defense in a tort suit. If the lack of resources produces substandard care, however, the tort standard of care will not, and—as discussed above—should not, protect the institution. What are the ensuing economic and social results? The defendant institution will expose public funding inadequacies to the journalistic and legislative eyes. The small hospital will have to find ways to generate sufficient revenues or risk merger, absorption, or corporate death. The choice is then between substandard care, with the liability costs it generates, and no care.

As political problems, these dilemmas are simply beyond the ability of tort litigation to solve. However, the tort threat does provide a market pressure encouraging quality standards, at a time when most of the market pressures are directed solely toward cost containment and profit. Hospitals have prospered well so far under prospective payment systems, 164 and it is too early to relax tort standards in response to a nebulous fear of financial disaster.

B. Uncertainty: Facing It, Reducing It, Sharing It

Doctors are afraid of uncertainty. Much of medical practice is full of uncertainty as to the causes and treatments of illness. The norms of tort law, vague as they often are, can provide a source of incentives to push medical decisionmaking to (1) reduce the uncer-

^{163.} See generally Havighurst, Reforming Malpractice Law Through Consumer Choice, 3 HEALTH AFF., Fall 1984, at 63; MEDICAL MALPRACTICE, supra note 17; Epstein, Medical Malpractice: The Case For Contract, 1976 AM. BAR FOUND. RESEARCH J. 87.

^{164.} See supra note 2.

tainty surrounding various treatments, thereby reducing variation and its attendant costs; and (2) share uncertainty with patients, as a way of reducing both doctor anxiety and the social costs of medical treatment. How can tort doctrine facilitate the handling of uncertainty?

1. The Defense of Conservative Treatment

The case law has recognized, through the best judgment and respectable minority exceptions to customary practice, the variation attendant upon many medical practices. A doctor can successfully defend nonintervention or refusal to prescribe when the procedures at issue have substantial risks of harm to patients. Thus, in *Haase v. Garfinkel*, ¹⁶⁵ the court accepted the defendant's evaluation that certain drugs carried risks that justified nonuse. Where research evidence is developing as to risks of a current treatment, the defendant may be able to argue successfully that caution counsels nontreatment.

Critics of tort law argue that it seems to demand the perfect (and most expensive) practice. The classic statement is found in Clark v. United States: 166

If a physician, as an aid to diagnosis, i.e., his judgment, does not avail himself of the scientific means and facilities open to him for the collection of the *best* factual data upon which to arrive at his diagnosis, the result is not an error of judgment but negligence in failing to secure an adequate factual basis upon which to support his diagnosis or judgment.¹⁶⁷

Once a diagnostic tool has come into widespread use and has become affordable, the threat of liability increases if the tool is not used. This results in cases like *Helling* ¹⁶⁸ and its progeny, in which courts reject a customary practice that fails to incorporate a simple low cost diagnostic test. In these cases, the courts have used tort doctrine as a lens, scrutinizing the prevailing practice, testing the practice against a cost-benefit standard, and rejecting the customary practice. ¹⁶⁹ These cases seem to violate the thesis that one is protected if he conforms to the customary practice.

^{165. 418} S.W.2d 108 (Mo. 1967).

^{166. 402} F.2d 950 (4th Cir. 1968).

^{167.} Id. at 953 (quoting Smith v. Yohe, 412 Pa. 94, 105, 194 A.2d 167, 173 (1963)).

^{168. 83} Wash. 2d 514, 519 P.2d 981 (1974). See infra notes 171-72 and accompanying text.

^{169.} See also Lundahl v. Rockford Memorial Hosp. Ass'n, 93 Ill. App. 2d 461, 465, 235 N.E.2d 671, 674 (1968) ("the usual or customary procedure might itself be negligence"); Favalora v. Aetna Casualty & Surety, 144 So. 2d 544 (La. Ct. App. 1962).

An argument may be available to a defendant in *Helling*-type situations, however. In *Clark*, ¹⁷⁰ the court demanded that doctors use the means to achieve the "best" data. In *Helling*, the test the court mandated physicians to use was assumed to be harmless as well as low in cost. Courts need to be educated to the fact that tests carry risks, not only in their administration, but in potential for overtreatment because of false positive results. In some cases, it can also be demonstrated that testing is pointless, since no intervention is possible regardless of the result. As discussed earlier, ¹⁷¹ doctors themselves need to be educated as to the costs of medical practices and the risks of acting in the face of uncertainty. Courts can do more than mirror a customary practice which lacks adequate support. They can learn that inaction may reduce harm and its costs, and that action may cause harm and added costs.

The court as a lens on medical practice needs to act cautiously in demanding too much where the costs of intervention may be high. A doctor should be able to argue that the standard conservative practice is justified or that he disagrees with the standard interventionist practice where evidence exists to discredit the standard or to suggest clinical caution. Consider the *Helling* decision. It could have been fought on different terms. The court considered requiring the simple pressure test for glaucoma to be justified by a simple application of the Learned Hand formula, B is less than PxL (burden of precautions is less than the probability of harm times the gravity of the injury). The court wrote that even though the chance of glaucoma is one out of 25,000 in people under forty years of age,

that one person . . . is entitled to the same protection, as afforded persons over 40, essential for timely detection of the evidence of glaucoma where it can be arrested to avoid the grave and devastating result of this disease. The test is a simple pressure test, relatively inexpensive. There is no judgment factor involved, and there is no doubt that by giving the test the evidence of glaucoma can be detected. The giving of the test is harmless if the physical condition of the eye permits. 172

Helling is viewed as an example of judicial cost-benefit balancing, overriding customary practice when the practice strikes the balance to the detriment of the patient. It is cited as an example of how courts will push a standard higher, consuming more resources. That is a mistaken reading of Helling. Courts are umpires, passive

^{170. 402} F.2d 950 (4th Cir. 1968).

^{171.} See supra notes 37-49 and accompanying text.

^{172. 83} Wash. 2d at 516, 519 P.2d at 983.

recipients of evidence presented by the parties. What seems to have been missing from *Helling* is a clear statement by the defendant ophthalmologist of the costs of imposing the pressure test on all patients, probably because the specialty of ophthalmology had not sorted out the ramifications of routine testing. If evidence were presented as to the risks of mandatory tonometry, the court might have ruled differently.

The research evidence reveals that most patients with a high measurement of intraocular pressure do not have glaucoma and that patients with a high measurement who have glaucoma measure less than one percent. Therefore, the false-positive rate is very high, causing worry and expense for treatment of a nonexistent disease. Moreover, treatment with drugs has not been proven to halt the progression of glaucoma. Would the presentation of this evidence, justifying the failure to routinely screen everyone for glaucoma, have caused a different result in *Helling*? It undercuts most of the court's assumptions about the merits of the test. The profession had simply not faced the uncertainty surrounding its own tests and incorporated the uncertainty into its own protocols. It thus failed to convince the court.

2. Sharing Uncertainty

The doctrine of informed consent has generated tremendous hostility in the medical profession, but it has also had some salutary effects in improving the level of risk disclosure to patients. A major component of disclosure in the medical setting involves sharing uncertainty with the patient. Jay Katz¹⁷⁵ argues that sharing uncertainty is at the heart of the doctrine, observing that it can substantially reduce the number of medical misadventures.

A doctor practices better medicine when forced to distinguish more clearly between treatments based upon "tested scientific evidence and those . . . beset by uncertainties or based on conjecture

^{173.} E. ROBIN, supra note 20, at 147. A recent discussion of the medical aspects of tonometry supports this conclusion, arguing in fact that the rate of false positives is much higher than Robin suggests. See Fortess & Kapp, Medical Uncertainty, Diagnostic Testing, and Legal Liability, 13 LAW, MED. & HEALTH CARE 213 (1985). The authors assume a sensitivity of 70% and specificity of 30%. Using a population of 25,000, they conclude that the test would produce 17,500 false positives and one true positive. The large group would be falsely labelled as at risk, requiring follow-up retesting over several years at great expense. Members of the group would also suffer from the anxiety of being diagnosed with incipient glaucoma.

^{174.} See Novack, Plumer, Smith, Ochitill, Morrow & Bennett, supra note 18.

^{175.} See J. Katz, The Silent World of Doctor and Patient 193 (1984).

and clinical intuition."¹⁷⁶ Iatrogenic effects may be reduced as a result. Uncertainty about treatments may lead to fewer medical interventions, as informed patients decide to avoid treatment. This seems to be contrary to the traditional interventionist approach to uncertainty. As Katz observes, "The high rate of 'unnecessary' surgery, of resort to antibiotics and to tranquilizers, bears testimony to physicians' propensity to resolve uncertainty and ambiguity by action rather than inaction."¹⁷⁷ Cost reduction will also occur as the result of effective informed consent. When interventions are presented as optional rather than medically necessary, fewer interventions, and the concomitant fewer adverse side effects, will both reduce costs.

V. THE JUDICIAL LENS: FOCUSING ON THE INSTITUTION

The ethicist is concerned with the ethical binds in which the individual doctor finds herself. The economist wants to reduce wasteful consumption of scarce resources. The lawyer and judge increasingly focus on the institution as the primary care giver, observing the coming of the corporation to health care. Recent decisions have noted the central role of the hospital in supplying goods, in furnishing auxiliary services to staff doctors, in defining administrative rules, and in obtaining informed consent form signatures. These services are charged to the patient directly and demonstrate the expanding role of the institution in health care delivery. Physicians need hospital affiliation. By 1975, no doctor would consider practicing without the resources of a hospital, and twenty-five percent of the 330,000 active physicians practiced fulltime in a hospital. It is estimated that almost eighty percent of the incidents leading to malpractice claims originate in hospitals.

The work setting has long been recognized by sociologists as a powerful force in shaping individual attitudes, providing a context in which "persistent and powerful demands cause the individual to behave in a certain way regardless of his personal qualities." Institutional demands often work at cross purposes with the detection of error, creating peer pressure dissuading a doctor from question-

^{176.} Id. at 45.

^{177.} Id. at 197.

^{178.} See, e.g., Magana v. Elie, 108 Ill. App. 3d 1028, 439 N.E.2d 1319 (1982). See generally supra notes 104-23 and accompanying text.

^{179.} S.J. Reiser, Medicine and the Reign of Technology 156 (1981).

^{180.} Id. at 157.

^{181.} E. FRIEDSON, supra note 9, at 94.

ing his colleague's judgment or informing authorities of his errors. The incentive structure can be changed, however, to improve the detection of error and medical misadventure. Several no-fault proposals place the hospital as the central figure in a compensation system, coupling financial insurance incentives with risk disclosure. ¹⁸² These proposals recognize the importance of the health care institution in designing incentives and thereby regulating medical practices.

The current cost constraints imposed by hospitals and other institutions on doctors through various incentive systems are one-dimensional; they ignore the costs of error and medical misadventure. The tort system can be more than a mirror of practice with regard to the institution. It can be a critical lens, focusing hospital attention on quality control.

Placing primary responsibility for medical error on the hospital would inevitably help to reduce the incidence of iatrogenesis. If a hospital faces liability directly or vicariously for the negligence of its agents, it will tighten its control over their practice of medicine. Starr observes, "Under corporate management, there is also likely to be close scrutiny of mistakes, if only because of corporate liability for malpractice."183 Modern data collection technology provides tools for monitoring medical practice, allowing the detection of unusual patient loss patterns, excessive surgery rates, or other costly problems. As one hospital administrator has noted, "The large conglomerate can purchase and/or develop sophisticated quality-ofcare control programs managed by statisticians." This is probably too optimistic a managerial view, since clearly defined protocols and ranges of treatment must be developed by the medical profession through research. If they are not, the quality control will be an illusion, and a cruel one, for doctors.

Channeling liability through the institution recognizes that the institution is in the best position to monitor iatrogenic effects. Expanded liability may therefore operate as one additional pressure encouraging hospitals to keep better records, increase consultations, allow time for doctor-patient conversation of an extended sort visu-

^{182.} See Havighurst & Tancredi, "Medical Adversity Insurance": A No-Fault Approach to Medical Malpractice and Quality Assurance, 613 INS. L.J. 69 (1974); INSTITUTE OF MEDICINE, BEYOND MALPRACTICE: COMPENSATION FOR MEDICAL INJURIES (1978); H.R. 5400, 98th Cong., 2d Sess., 130 Cong. Rec. 2553 (1984) (the Moore-Gephardt Bill), proposing a hospital-oriented system in which disclosure of medical misadventure to patients is required.

^{183.} P. STARR, supra note 6, at 447.

^{184.} Quoted in id.

alized by Katz, and evaluate procedures in light of both input costs and side effect costs. In one recent case, the Humana Corporation, the first of the megacorps which are rapidly coming to dominate health care delivery, was held liable for both compensatory and punitive damages to injured patients in one of its subsidiary hospitals. The court found that Humana had total managerial and legal control over its subsidiaries but failed to hire competent and well-trained professional, administrative, and nursing staffs. It also failed to regularly monitor or evaluate personnel. 185

The ethicist tends to look too narrowly at the dilemmas of choice confronting the doctor. The economist and the sociologist concentrate on the institutional setting in which the doctor operates; so should the lawyer and the judge. The institution should be scrutinized by the lens of litigation. The hospital should save money only after reassurance that diagnosis and treatment are minimally adequate. Cost as a defense by either doctor or institution should be rejected. While these proposals may in the short run confront both doctors and hospitals with a cruel choice, they force consideration of the political issue of support for the poor and the elderly. They also increase the incentives for scrutinizing medical error and the iatrogenic costs of treatments. Cost must be seen as encompassing not only the short-run tradeoff between reimbursement and expense, but also the long-run costs of mistakes and failures of introspection.

^{185.} Olsen v. Humana, Inc., No. 107480, slip op. (Johnson City Dist. Ct., Kan., Nov. 7, 1984).