

## Medical Licensing

### *Existing Public Policy and Technological Change*

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Medical licensing is required in all fifty of the United States. State medical boards may deny individuals the right to practice medicine if they (1) do not meet state-defined standards for training or (2) are found to be incompetent or malfeasant. Licensure is thought to provide information to consumers about physicians' training and competence. It is also thought to deter malpractice by physicians who offer services they are not competent to perform or inappropriately prescribe controlled substances.

With technological change—primarily innovations in computer hardware and software—the rationale for public-sector intervention in the form of physician licensing has weakened. It is now feasible to provide consumers with direct, online access to information about physicians' education, training, and specialty certification. At the same time, consumers may be made aware of a physician's history of malpractice claims and settlements, hospital disciplinary actions, and fraudulent behavior.

Even more important to consumer protection is the fact that in health care provider organizations, technology has made the practice of medicine observable through software that allows providers to profile the practice patterns of individual physicians. Physicians are compared with others in the same field. This innovation, teamed with increased liability on the part of institutional health care providers, protects consumers. Practice outliers are identified, counseled, and, if necessary, "deselected."

In regard to the incentive effects of licensing—those that discourage opportunistic behavior on the part of physicians—technology has made existing deterrents redundant. We no longer need the loss of license hanging over physicians as the proverbial stick to deter malfeasance. Instead,

the access to information in databases has created a new, substantial penalty for malfeasance: public knowledge. For example, the ability to make judgments public has upped the ante in malpractice cases, as physicians want to avoid the loss of reputation that results from public disclosure.

Improvements in computer hardware and software likewise have made it possible to limit the inappropriate prescription of controlled substances, an area of abuse that has been a major cause of state medical disciplinary actions over the years. Prescription activity can now be monitored on a nearly real-time basis. In several states where prescriptions are monitored, forgeries and falsifications have been virtually eliminated.

This chapter documents the progress in monitoring physicians and providing consumers with direct access to information about physicians and other service providers. As these efforts increase, the case for state spending on medical licensing and discipline weakens. Where information is widely available, it is hard to argue that state medical boards add to quality assurance in the market for physician services.

#### *Arguments Supporting Government Regulation of Medical Professionals*

A popular view is that consumers need the guidance of a public agency to assess the quality of physicians' service.<sup>1</sup> Licensure is defended as guaranteeing minimum quality in a situation in which risk cannot be sufficiently insured and information is imperfect (Arrow 1963).

Opponents of licensure have long argued that certification (under which training is verified, but uncertified practitioners are not barred from providing care) gives consumers the same information but is less restrictive and intrusive.<sup>2</sup> Furthermore, some people have suggested that the government need not intervene at all, that in a purely market system, if individual and institutional reputation did not offer sufficient protection to consumers, private credentialing agencies could be expected to emerge (Friedman 1962).

A justification for licensing over certification is that licensing increases the penalties for malfeasance (Svorny 1987). By limiting entry and reducing competition from nonphysician service providers, licensing inflates physicians' incomes. Physicians who engage in opportunistic or fraudulent behavior face a substantial loss if their behavior is discovered and

their license is revoked.<sup>3</sup> In this view, state licensing adds to market penalties (such as loss of reputation) to deter malfeasance.

In summary, state licensing has been defended as a means of assuring consumers and discouraging physician malfeasance. With the advent of the computer age, state efforts in this regard are increasingly redundant to market outcomes. Computer hardware and software offer wide access to information, which serves both to inform consumers and deter physician malfeasance. Technological change has led to the real-time assessment of physicians' performance, which offers health care consumers substantially increased protection from physicians' malfeasance.

### *Public Knowledge*

Innovations in computer software and hardware have dramatically changed the market for physicians' services by increasing the amount of information available to consumers. Information was once so sparse as to encourage some economists to argue that medical markets in large, densely populated communities did not have the information transmission mechanisms to support competition among practitioners: "Consumers cannot accurately catalog in their minds what they hear about thirty different physicians . . . therefore, as the number of physicians within the community increases, the quality of information consumers have concerning physicians' relative qualifications and prices declines" (Pauly and Satterthwaite 1981, 490). Today, however, a great deal of information is available, much of it on the Internet. For example, Los Angeles's Cedars-Sinai Hospital maintains a Web page ([www.csccc.com/physicians](http://www.csccc.com/physicians)) that lists physicians' training, fellowships, board certifications, faculty positions, and clinical expertise. Consumers interested in a physician's specialty board certification can access this information through the American Board of Medical Specialties' Web site ([www.certifieddoctors.com](http://www.certifieddoctors.com)). The Web site includes information on physicians certified by the American Board of Medical Specialties' twenty-four member boards. More detail on certification is available for a fee: "Official Certification Data Reports" include the date on which a physician received his or her specialty certification and the date on which the certification expires.

This access to information about a physician, which includes his or her area of specialization, length of specialty training, and experience, is superior to the simple verification of medical training provided by traditional

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licensing. But where consumers have access to such information, it is not clear why they should desire assurance in the form of a state-granted license.

In addition to checking a physician's training and certifications, consumers can now judge the quality of the provider group to which that physician belongs. For example, a private provider, PacificCare, posts performance indexes on its Web site ([www.Pacificare.com/california](http://www.Pacificare.com/california)) for the physician groups in its network (Chesanow 1999). Along the same lines, United HealthCare has announced its intention to make performance-related information about doctors and hospitals available to millions of patients across the United States (Butler 1998).

Information is available on health plans as well. The Web site of the Pacific Business Group on Health ([www.healthscope.org](http://www.healthscope.org))—a coalition of West Coast employers—provides information about the quality of preventive care and patient satisfaction for specific health maintenance organizations (HMOs). It includes statistics on health plan accreditation, physician groups' opinions of health maintenance organizations, and health maintenance organization quit rates.

Besides access to information on physician groups and health plans, consumers can also surf the Web for information about diseases and methods of treatment.<sup>4</sup> A patient suffering from a rare disease has access to medical information relevant to his or her condition. Through various Internet sites and libraries, patients have direct and free interface with MEDLINE, the software that physicians use to search medical journals ([www.ncbi.nlm.nih.gov/PubMed](http://www.ncbi.nlm.nih.gov/PubMed)). And patients can interact with one another directly online. For example, the Association of Cancer Online Resources information system ([www.acor.org](http://www.acor.org)) offers access to approximately one hundred electronic mailing lists and direct links to patient sites (Smith 1998). If a physician fails to offer a range of treatment options, a patient is more likely to know what questions to ask. With the emotional support of those who have been in the same situation, the patient may seek a second opinion, offering protection from physician incompetence, and is more likely to learn about successful unconventional approaches.

An important consequence of this access to information is that the penalty for malfeasance has increased. The magnitude of the disciplinary function generated by public access to information is evidenced by physicians' efforts to defend against malpractice claims that, at one time, would have been settled (Goodman 1999). As information technology improves,

market penalties for malpractice grow, and the justification for public intervention in the form of state medical licensing and discipline diminishes.

### *Public versus Private Data Provision*

To date, a significant portion of collecting data on individual physicians has been mandated and controlled by the federal and state governments. Established by the Health Care Quality Improvement Act of 1986, the National Practitioner Data Bank (NPDB) was set up as a central source of information on physicians (Setness 1996). The data bank is supported by user fees and essentially enjoys a monopoly position, as hospitals and other health maintenance organizations are required to check periodically on the physicians with whom they have contracted. The data bank includes reports on medical malpractice payments, adverse licensure actions, adverse clinical privilege actions, and adverse professional society membership actions (NPDB 1999). It is the utmost irony that politicians have withheld access to the database from consumers and that legislation to remedy this has failed to garner sufficient support in the U.S. Congress (Rogers 1998).

The NPDB does not offer comprehensive coverage of physician malpractice. Consequently, some physicians have been able to keep their names out of the NPDB by bargaining out of settlements at the last minute, leaving their professional corporations to shoulder the liability (a "corporate shield") (Guglielmo 1996; NPDB 1999). Also, the adoption of alternative dispute resolution by managed care organizations, which requires members to agree to arbitrated settlements, has kept some physicians out of the data bank. Under this arrangement, a managed care organization, rather than the doctor who provided the service, is named in a malpractice complaint (Guglielmo 1996).

Federal and state efforts presume that physicians would not be privately credentialed in an unregulated market, but to some extent, they have been. As discussed earlier, hospitals, managed care providers, and other agencies make information about physicians' training, specialty certification, and expertise available to the general public.

What would the situation be if there were no government-mandated data banks or any government-mandated reporting requirements? For most physicians, the reputation of the managed care organization with

which they contract might be sufficient to offer consumers assurances about service quality. If the reputation of the managed care provider were not sufficient assurance, physicians would have an incentive to reveal information about themselves voluntarily.

Without state licensing or public credentialing, we would expect private associations of physicians to be formed. Such groups would have an incentive to review all possible information, including information that could be hidden from the NPDB, when determining which physicians to include. As with organizations that offer specialty certification, these groups would work to enhance the market value of member physicians by setting standards and admitting only those physicians who met their standards.

Physicians who chose not to reveal information or who were rejected on the basis of group standards would be notable for their absence. Certainly, the weakest quality assurance would surround those physicians who either would not open their records for verification and review or who were not associated with a reputable hospital or managed care provider.

It is likely that new or existing private companies will assume the task of recording public information and selling it to interested parties. More informally, as the Internet reaches more libraries and homes, the access to knowledge of other patients' experiences with particular physicians may prove to be the best private credentialing of all.

Mandated, subsidized public-sector Web sites suggest the type of data that might be voluntarily provided and certified on private Web sites in the absence of government intervention.<sup>5</sup> In Massachusetts, the information provided includes demographics of the physician's practice, education and training, awards received, participation in peer-reviewed publications, disciplinary history, and paid malpractice claims and settlements. Some states disclose criminal convictions, serious misdemeanors, and final disciplinary actions by a state licensing board or hospital. California, for example, offers information on license status, out-of-state discipline history, felony convictions, accusations filed by the attorney general, malpractice judgments, and loss of hospital staff privileges.

### *Monitoring*

One of the reasons that consumers have increased access to information about physicians is that for both economic and quality-of-care reasons, providers have begun to monitor individual physicians. Computer software

allows organizations to gather data and compare physicians' practice patterns.

Physician profiling looks directly at patterns of care and resource use. A profile might show how a physician's treatment of a specific diagnosis compares with those of his peers, based on length of stay, cost per case, and tests and procedures administered. A study of physicians who are part of the United HealthCare network made front-page news when it found scores of physicians failing to prescribe essential prescription drugs and failing to order appropriate diagnostic tests (Butler 1998).

Ahwah and Karpel (1997) described the software available for profiling emergency room physicians and reported on an effort by the American College of Emergency Physicians to develop clinical practice guidelines against which physicians can be measured. Similarly, the American Medical Association's Accreditation Program is working on a long-term project to set criteria by which physicians' performance can be evaluated on a disease-by-disease basis (Chesanow 1999).

One encouraging, even remarkable, observation is that physicians do respond when given information about their own behavior. When told that they practice outside the norm or that certain procedures are ineffective, there is anecdotal evidence that they change their practice patterns (Chesanow 1999; Montague 1994). One hospital administrator is quoted as saying, "Physicians are extremely responsive to getting good information. We have already seen a significant improvement in care quality" (Gilbert 1998). When physicians don't respond, managed care organizations use profiling to decide which ones will participate in its network (Krentz and Miller 1998).

The ability to monitor physicians' actions increases the probability of identifying incompetence or malfeasance. By shortening the lag time on identifying incompetence and malfeasance, the computer-aided monitoring of physicians offers patients more protection than the disciplinary function of licensing ever could. The importance of license suspension and revocation thus diminishes in the overall effort to ensure physicians' service quality.

#### *Incentives for Peer Review*

In the past, it was not uncommon for physicians to be criticized for maintaining a "code of silence," that is, for being unwilling to report incidents

of peer malpractice (Crane 1999). Recent changes in the health care industry, however, have contributed to a willingness to engage in peer review. The first is the move toward managed care, in which institutional providers of health care contract with large numbers of physicians for patient care. Managed care is an increasingly important source of pressure for physician profiling and peer review, as managed care providers, induced by the market to promote quality and reduce unnecessary spending, evaluate the performance of their physicians.<sup>6</sup> Capitation payment schemes—under which the financial risk of patient care is shifted from insurers to provider groups—are thought to further motivate efforts toward physician profiling and peer review.

On the judicial side, changes in how people perceive the role of hospitals and managed care providers have led courts in the United States to shift the liability for physician malpractice toward the institutions with which the physicians contract. This shift in liability has strengthened the incentives to review physicians' practice patterns.

#### Market-Based Incentives for Peer Review

The greater interest in peer review is, to some extent, the result of competition among health care insurers and providers. For example, it is now common for large corporate employers and public-sector employee organizations to request information on hospitals' success rates and physicians' practice patterns from the managed care plans with which they contract. The National Committee for Quality Assurance, a private, nonprofit agency that assesses managed care organizations, has been working for nearly a decade on its Health Plan Employer Data and Information Set, which ranks managed care providers (Grimaldi 1997). On its Web site ([www.ncqa.org](http://www.ncqa.org)), the committee advertises the names of major employers who have requested reports.

Firms that purchase insurance for a large number of employees have the clout to force providers to gather information on physicians and to make it available on a timely basis (Slomski 1995). Chesanow (1999) reported on efforts to assess quality. For example, in December 1998, Health Net, California's second largest HMO, released a report card rating its physician groups on their treatment of asthma patients. Poor compliance with established asthma treatment guidelines led Health Net to tie bonuses to their physicians' report card ratings. Since 1993, PacificCare of California has made quarterly assessments of its member providers' performance.



PacificCare examines both clinical quality (for example, rates of cervical cancer screening) and member satisfaction.

A new industry, taking advantage of computer technology to provide health care performance measurement services, offers providers assistance in surveying consumer satisfaction. One firm, for example, advertises to potential clients its ability to pull together "real-time data about individual departments, units or physicians" within hospitals, health systems or provider networks (National Research Corporation; [www.nationalresearch.com](http://www.nationalresearch.com)).

The pressure from employer groups that motivates efforts to gather data about managed care is just one of the factors creating incentives for physician profiling and peer review. A second pressure comes from the very nature of physician associations within managed care organizations. In managed care, physicians become associated with the managed care provider for which they work, and individual physicians do not want to see their reputations tarnished by underperforming colleagues.

One lingering problem is the fear of physicians on peer review committees of legal consequences, that is, lawsuits by disciplined physicians hoping to overturn judgments against them. But the federal Health Care Quality Improvement Act of 1986 provides immunity for physicians who serve on peer review committees (Baxter 1997).

### Capitation

Providers that assume the risk associated with payment on a capitated basis are especially interested in software that profiles individual physicians' resource use (Krentz and Miller 1998). Under capitation arrangements, managed care organizations or groups of physicians assume the risk of patient care normally held by insurance companies. The providers receive a predetermined payment to cover the care of an individual for a fixed amount of time. Unlike traditional payment schemes, in which care is reimbursed on a cost basis, if a group accepting capitation payments is unable to control costs, it must bear the consequences. Capitation has become popular for just that reason: it creates incentives for health care providers to consider the cost along with the efficacy of alternative treatment patterns.

Where reimbursement for claims is made on a capitated basis, a physician's actions influence his or her peers' compensation. For example, if one doctor spends too much on unnecessary tests, there will be less money

left for other uses. The result is an incentive to closely monitor physicians' practice patterns with respect to individual disease processes (Crane 1999; Montague 1994).

As a result of capitation, "economic credentialing" has become popular. Physicians whose costs exceed normal practice patterns are identified and scrutinized for excessive and/or unnecessary procedures. The purpose is to discourage physicians from recommending costly methods of care that are not recognized as appropriate, with the goal of saving money for the insurer or health care organization. Physicians' practice patterns are accordingly the subject of intense scrutiny. Lowes reported that "observers of the group practice scene are virtually unanimous in predicting that physician evaluation will become more commonplace and more sophisticated as capitation gains ascendancy" (Lowes 1995).

#### Liability

One of the biggest changes with respect to incentives in medical markets is that the courts are holding hospitals and other health care providers and insurers liable for the actions of physicians working under their auspices, whether or not they employ those physicians directly.<sup>7</sup> This change in the courts' interpretation of liability reflects the growing perception among consumers that hospitals and managed care organizations are care providers, even when the hospital or organization does not have a direct employment relationship with its doctors. Because the large providers are assumed to vouch for the skills of physicians within their umbrella of care, the courts have dropped previous interpretations that directed liability solely to individual physicians.

Because hospitals, managed care organizations, IPAs (independent practice associations), and other entities are now directly liable for the actions of their physicians, careful examination of their practice patterns has become a necessary business practice. Liability creates incentives to assess a physician's ability, as well as his or her inclination toward fraud, before establishing a formal relationship. Once a relationship has been established, peer review committees assess the efficacy of practice patterns. Physicians whose practice patterns lead to undesirable outcomes can be identified and instructed to improve their performance. Managed care organizations have an incentive to drop physicians who practice in ways that leave the organization open to liability (Liner 1997). Similarly, hospital peer review committees have an incentive to limit or deny hospital

privileges when necessary to protect against adverse legal judgments. In this fashion, affiliation with such an organization increasingly becomes a "seal of approval," a form of private-sector, voluntary certification.

### *Prescription Drug Abuse*

State medical licensing has played a role in curbing prescription drug abuse, a significant share of all disciplinary actions against physicians. In this respect, advances in technology have reduced, if not eliminated, the need for licensing. In several states, electronic substance-tracking programs have proved successful in reducing the number of inappropriate prescriptions; other states successfully track prescriptions with a heavy paper trail by using triplicate prescription forms (Gebhart 1997).

Triplicate prescription arrangements track "schedule II" drugs, those medications with a high potential for abuse.<sup>8</sup> Not only do these arrangements reduce forgery and illegal sales by doctors (Colan 1991), but they also allow regulators to identify drug-dealing professionals, prescription thefts, and people who trick physicians and pharmacists into prescribing drugs (Weikel 1996).

Weikel (1996) found that triplicate prescription requirements in Michigan and New York had virtually eliminated prescription forgeries and falsifications. Before adopting the prescription-monitoring system, both states recorded more than 100,000 forgeries and falsifications a year.

### *Conclusion*

It is reasonable to ask whether in the face of all of the innovations noted here, it makes sense to preserve licensing restrictions and disciplinary activities. The advent of computer technology and innovative software programs have made information on physicians and practice patterns available to health care providers and their patients. Because liability for physician malpractice has shifted, hospitals, health maintenance organizations, insurers, and even employers (who purchase insurance for their employees) who do not take advantage of the new technology to check physicians' qualifications are open to costly judgments in court. Prescription fraud can be reduced by means of electronic tracking. For all these rea-

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sons, it becomes ever more difficult to justify state licensing and the continued funding of state medical boards.

Fraud and malpractice are by their very nature difficult to discover or identify, and they will never be eliminated. But the issue today is whether state medical boards are redundant to market mechanisms borne of advances in computer technology.

Many economists argue that licensing hurts society by restricting supply and offers little, if anything, beyond the quality assurance provided by certification, referrals, and reputation. With recent advances in technology, consumers—and the institutional providers who serve them—are allowed direct access to physicians' performance records. The result is a greater base of information from which to make intelligent health care decisions.

NOTES

1. Derbyshire 1969 outlines the history of medical licensing regulation in the United States. On justifications for licensure, see Leffler 1978.
2. Certification offers patients additional legal options for care outside traditional medicine.
3. The incentive effects of this arrangement are similar to those described in Lazear 1981 and Klein and Leffler 1981.
4. Examples of sites with health information include the Cable News Network's [www.cnn.com/HEALTH/](http://www.cnn.com/HEALTH/); Lycos's [Webmd.lycos.com](http://Webmd.lycos.com); AOL's [www.aol.com/Webcenters/health/home.adp](http://www.aol.com/Webcenters/health/home.adp); and the Health on the Net Foundation at [www.hon.ch](http://www.hon.ch).
5. See, for example, [www.docboard.org](http://www.docboard.org); also Osheroff 1997; Rogers 1998.
6. By 1995, more than 83 percent of all U.S. physicians had at least one managed care contract.
7. This is discussed in Svorny 1992.
8. Controlled substances are "scheduled" under the Federal Controlled Substances Act according to their potential for dependence and abuse (Nowak 1992).

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