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## DO ECONOMISTS REACH A CONCLUSION?

### MEDICAL LICENSING

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## Licensing Doctors: Do Economists Agree?

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[Abstract, Keywords, JEL Codes](#)

IN THE UNITED STATES, STATE LEVEL BOARDS DICTATE RULES for physician licensure and discipline.<sup>1</sup> Would-be physicians must complete an approved medical training program and pass a standardized test. Scope-of-practice laws prohibit other health professionals from offering similar services. Given the resources involved in licensing doctors, taxpayers might be surprised to learn that the link between licensing and service quality is tenuous at best. In fact, economists who have examined the market for physician services generally view medical licensing as a constraint on the efficient combination of inputs and a drag on innovations in health care and medical education.

### LICENSING AND PHYSICIAN QUALITY

Shapiro (1986) argued that the assumption of complementarity between human capital investment and physician service quality is “critical to the efficacy of licensing” (844). Yet critics of licensure reject the idea that approved programs of education and training assure competent care.

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<sup>1</sup> The Federation of State Medical Boards documents state licensing requirements, as well as characteristics of state boards and regulations regarding discipline ([www.fsmb.org](http://www.fsmb.org)).

Currently the process for ensuring physician quality relies wholly on graduation from an approved medical school and the passing of a licensing examination . . . no reexamination is required. . . . State licensing boards are responsible for monitoring physicians' behavior. . . . Unfortunately, this approach for assuring physician quality and competence is completely inadequate. (Feldstein 1994, 189)

Licensure does not restrict physicians to practice in a particular area of medicine. (In the United States, it is not against the law for an ophthalmologist to perform heart surgery.) Furthermore it is hard to argue that passing a standardized exam . . . offers much information about physician competence or success. (Svorny 2000, 303)

licensing laws supported by the AMA left physicians free to practice medicine according to any system of therapeutics they chose once they had obtained a license to practice. (Goodman 1980, 7)

consumers were (and still are) not as well protected from unqualified and unethical practitioners as they have been led to believe. (Feldstein 1999, 395)

It is hard to argue that quality care is the objective as, in many cases, licensing laws exclude individuals for reasons unrelated to their professional competence.

Residency requirements for foreign-trained physicians . . . continue to exceed the requirements for graduates of U.S. medical schools. (Seldon, et al. 1998, 820)

Researchers question whether state medical boards effectively oversee medical professionals.

few resources have been devoted to monitoring the quality of practice after an individual has been licensed. Applicants to medical school are given close scrutiny. The

budgets for the state medical boards suggest that the licensed practitioners are not. (Benham 1991, 81)

In the United States, state license revocation efforts have been subject to criticism for avoiding (admittedly difficult) issues of physician competence and for focusing, instead, on physicians who prescribe narcotics inappropriately to others or who abuse drugs and/or alcohol themselves. (Svorny 1992, 32)

Medical boards in many states do not even specify incompetence as grounds for disciplinary action. (Gaumer 1984, 398)

To many, it is clear that the current system of regulation does not assure quality care.

Though no one is suggesting that eliminating licensure and other requirements will reduce . . . negative outcomes, it is clear that regulation does not assure quality care. (Folland, Goodman, and Stano 2001, 358)

The available research does not suggest that existing systems of regulation have effectively controlled initial or subsequent competency of professionals. (Gaumer 1984, 406)

[There is evidence that mandatory programs of continuing education are] burdensome and fruitless. (Gaumer 1984, 399)

The performance of the medical profession, state regulatory agencies, and the malpractice system in protecting patients against negligent physicians has been inadequate. (Feldstein 1999, 397)

An important point is that, perversely, licensing can reduce the quantity and quality of health care.

Restrictive licensing can . . . result in declines in the quality of received services in that there may be (1) self-substitution of inferior products and/or services . . . ; (2) decreases in the average per capita service time rendered; for example, short, hurried, delayed office visits with a harried physicians; (3) differential geographic availability as numbers are reduced and the remaining members of the profession can choose their locations with more discretion, such as doctor shortages in rural areas; and (4) increased waiting time for provision of a service where delay in service entails expense for the buyers. (Carroll and Gaston 1979, 2)

The existing system results in some persons receiving no care, or being treated by individuals without any medical training (family members, neighbors, friends). (Fuchs 1986, 19)

Kugler and Sauer (2004) suggest the high costs of obtaining a license may deter talented individuals from pursuing state approval to practice, reducing physician service quality. Examining the earnings of immigrant physicians in Israel, they find a negative selection bias due to the cost of re-licensing. By negative selection, they mean, “immigrant physicians who acquire a license have lower intrinsic earnings potential (in the absence of a license) than those who do not” (Kugler and Sauer 2004, 5).

Benham (1991) pointed to yet another way in which licensing restrictions reduce service quality.

a clear consequence of licensure is to inhibit the production of information concerning the comparative performance of practitioners and hospitals. This in turn reduces the incentive to introduce innovations that would facilitate comparative evaluations and improve quality control. (Benham 1991, 89-90)

Phelps (1997) does not share this view. He sees licensure as a “guarantee” of minimum quality that may increase the production of information.

On net, one cannot say that licensure is necessarily a benefit or a harm to consumers. The potential gains in quality information may outweigh any costs from monopolization. Indeed, it may even be that the market operates more competitively because the “minimum quality” guarantee that licensure produces may increase consumer willingness to search for lower prices. (Phelps 1977, 243)

Of course, such a “guarantee” might result from certification rather than licensure. The relative merits of the two schemes are discussed below.

### **COMMENTS ON THE EFFICIENT PRODUCTION OF PHYSICIAN SERVICES**

A concern is that physician licensure limits innovation in medical markets and flexibility in hospital and other institutional staffing.

#### **On innovation**

I am persuaded that licensure has . . . retarded technological development both in medicine itself and in the organization of medical practice. (Friedman 1962, 158)

it must be kept in mind that the various licensure laws . . . have rarely been designed to keep up with the rapidly changing organizational and technical innovations that are potentially feasible in health-care delivery. The preponderant view—certainly among health economists—is that physicians have not even begun to exploit the productivity potential actually within their reach. (Reinhardt 1975, 231, 233)

Medical licensure has had a deleterious effect on the quality of medical care by sharply reducing heterogeneity in the practice of medicine. . . . Even in those areas

where promising innovations have arisen, medical licensure laws have restricted, or threatened to restrict, their application. (Goodman 1980, 36)

It is my view that economists have concentrated excessively on the indirect effects of barriers to entry and too little on such issues as restrictions on innovation, excessive training requirements. (Benham 1980, 24)

### **On scope-of-practice limitations**

It is now widely accepted that more extensive task delegation in medical practice would be in society's interest. . . . Constraints widely believed to inhibit more efficient use of health manpower are the various licensure laws governing the practice of medicine in this country. (Reinhardt 1975, 229, 231)

Many studies . . . show that the quality of care would not suffer if licensure policies were selectively liberalized allowing mid-level practitioners to perform some tasks not reserved only for . . . physicians. (Gaumer 1984, 397)

Scope-of-practice rules limit medical professionals' career mobility (Gaumer 1984). Licensing statutes preclude the informal transitions that occur in other industries as individuals gain expertise over time.

### **On inefficient training requirements**

The American Medical Association has the power to control the *costs* of medical training as well as the number obtaining that training. By making it more costly to become a physician . . . the profession may insure that all incomes rise while the expected returns "at the margin" remain normal. The profession, in other words, is influenced to make medical education as inefficient as possible. (Lindsay 1973, 346)

licensing can cause applicants to overinvest in education and formal training. . . . If these attributes do not improve productivity the investments are wasted socially. (Dorsey 1980, 433)

**GENERAL AGREEMENT THAT LICENSING ENFORCES CARTEL BEHAVIORS**

Economists see state licensing as a source of cartel power among physician groups. Kessel (1958 and 1970) pointed out that licensing requirements increase returns for existing practitioners at consumers' expense. He was especially concerned that graduation from an American Medical Association-approved medical school was a condition for admission to state licensing exams—allowing organized medicine to control entry to the very market it served (1958, 283).

Folland, Goodman, and Stano (2001) note that “organized medicine historically exerted considerable influence over the supply of trained physicians” (354). Given more recent empirical evidence, however, they express doubt about the continued role of medical professionals in limiting medical school enrollment.

data in recent decades indicate that medical school enrollments are responsive to market forces . . . continuing to view medical education as controlled by a monolithic or conspiratorial medical profession is somewhat implausible. (Folland, Goodman, and Stano 2001, 354)

Still, they write of:

the questionable effects of licensure on quality...and the anticompetitive effects of restrictions on entry and restrictions on the scope of practice of potential competitors. (Folland, Goodman, and Stano 2001, 358)

Zweifel (1991) listed several factors that favor medical groups (over other professions) in acting as a cartel. Except perhaps for elective surgeries

on the wealthiest clients, medicine is characterized by a lack of international competition for its product. Also, what is sold is a personal service that cannot be resold, making it difficult to undermine price discrimination. Finally, licensure allows control of market entry.

The view that licensure facilitates cartel-like behavior has been expressed over and over.

[organized medicine] has, for over 100 years, sought and obtained special privileges from government. These special privileges take the form of restrictions on free competition in the marketplace. (Young 1987, 2)

In granting sole authority to the boards to issue licenses, society has, in effect, given considerable power to organized medicine to restrict the supply of physicians and to influence the pattern of medical care for the benefit of the profession. (Rayack 1982, 393)

The ability of the profession to influence medical school admissions and licensure exams, as well as their resistance to legal delegation of more routine tasks to other health professionals, has certainly helped perpetuate their economic advantage. (Burstein and Cromwell 1985, 77)

The establishment of limits on the use of physician extenders is yet another method physicians employ to protect their economic interests. (Santerre and Neun 2000, 423)

Economists have, for some time, suspected that occupational licensure operates as a legally sanctioned cartelization device, restricting entry . . . and restraining competition. . . . Excessive limits . . . can result in monopoly rents for members of the profession and higher prices and fewer services for consumers. (Martin 1980, 143-144)

The AMA has not only controlled the supply of medical school spaces in the United States . . . but also has worked to assure that state licensing statutes require graduation from AMA-accredited schools. Foreign entry has also been



curtailed by restrictive licensing laws as well as a strict federal immigration policy. (Noether 1986, 233)

coupled with findings that consumers are rarely, if ever, involved in the process, and that the resulting regulations do in fact raise prices and decrease the availability of services, the evidence supporting the self-interest model of regulation is substantial. (Begun, Crowe, and Feldman 1981, 250)

The emphasis in terms of quality is always on the training of *entering* physicians and not on those currently practicing in the profession. It is in the economic interests of current practitioners . . . they will receive higher prices and higher incomes. . . . If the medical profession was concerned primarily with quality rather than with monopoly power, there would be at least some emphasis by the profession on the quality of care provided by practicing physicians. (Feldstein 1999, 383, 386)

By the 1950's, organized medicine had achieved virtually all of its political goals . . . [one of which was] to control entry into the medical profession and to suppress competition for physicians' services. . . . The most important consequence of the control of medical education by organized medicine . . . was that physicians acquired the power to reduce the supply of medical services and increase their incomes. (Goodman and Musgrave 1992, 137, 147).

As time passed, restrictions were expanded to cover . . . advertising, price cutting, and other conduct considered to be "unprofessional." Clearly licensing laws serve not only to protect patients but also to limit the number of practitioners, thus protecting physicians from would-be competitors. (Henderson 2002, 107)

The [American Medical Association] has been . . . vigorous in attacking health practitioners who are widely considered

legitimate but who represent a competitive threat to the members of the medical profession. (Rayack 1982, 405)

Mainstream physicians benefit from a more restrictive regulatory regime governing practitioners of alternative therapies. . . . Licensing laws that reduce the supply of such alternative services harm consumers by rendering such low cost options unavailable while these laws also appear to create rents for mainstream physicians. (Anderson, et al., 2000, 497)

the medical profession as a whole must ultimately bear responsibility for the nature of these laws and their effect on resource allocation within the health-care sector. (Reinhardt 1975, 232)

Of course, given the nature of the political system in the United States, it is likely that both consumer and physician interests influence regulatory outcomes. In empirical tests, Leffler (1978) found that variations in licensing laws across states could be explained by consumer demand for quality. However, two studies that examined the relative influence of physicians and consumers found that physician interests dominate regulatory outcomes.

on the margin, the licensure restrictions in practice in 1965 increased entry costs by more than they reduced consumers' costs of generating quality assurance in the market for physician services. . . . The implication is that professional or special interests dominated consumer interests in the setting of licensure requirements. (Svorny 1987, 507)

[With respect to the regulation of certified nurse midwives] . . . supply-side (quantity reducing) effects dominate the demand-side (quality assurance and quantity enhancement) effects . . . it appears that regulation of this type of service has detrimental consumer welfare effects. In a time when many medical service delivery systems are in chaos, the advantages to deregulation of such fundamental activities should not be minimized. (Adams, et al. 2003, 673)

The continued influence of the American Medical Association is attributed to effective lobbying and few challenges from consumers. Milton Friedman wrote:

The groups that think they have a special interest . . . are concentrated groups to whom the issue makes a great deal of difference. The public interest is widely dispersed. In consequence . . . producer groups will invariably have a much stronger influence . . . [than the] widely spread consumer interest. (Friedman 1962, 143)

Weingast (1980), alone, takes exception to the idea that physician interests will dominate the political decision-making process.

While the producers probably have superior organization, once the issue enters election campaigns, further coordination by the diffuse nonproducers is not needed: all they need to do is vote. (Weingast 1980, 90)

However, if it is costly to assess the likely vote of each candidate on every issue, nonproducers may face higher costs of influencing outcomes, bringing us back to the more commonly held belief that professional groups are likely to dominate public policy.

### **DO INFORMATION ASYMMETRIES JUSTIFY LICENSING DOCTORS?**

Some economists take the position that information asymmetries justify government intervention in medical labor markets. As Evans puts it,

the essence of the professional relationship is that the consumer does not know what he needs before service, nor does he know afterward whether he was adequately served. (Evans 1980, 250)

The counter position is that word-of-mouth and physician referrals provide guidance, as do other mechanisms, such as institutional reputation.

people do not . . . choose physicians by picking names at random from a list of licensed physicians. (Friedman 1962, 158)

even in many situations labeled 'emergency' the consumer has in principle a considerable amount of power over what can be done to him (including whether or not he chooses to be an 'emergency' case) and which physician he chooses in order to obtain advice. (Pauly 1980, 43)

Since a consumer has generally recognized the existence of a problem, he can presumably recognize its diminution. This ability to evaluate quality *ex post*, even if the evaluation is only approximate, provides checks on low-quality sellers, through both liability laws and the consumer's ability to shop elsewhere if quality is poor. (Beales 1980, 128)

### EXAMINING THE EXCEPTIONS

Arrow's 1963 paper on medical care is frequently cited in support of physician licensure.

The general uncertainty about the prospects of medical treatment is socially handled by rigid entry requirements. These are designed to reduce the uncertainty in the mind of the consumer as to the quality of product insofar as this is possible. I think this explanation, which is perhaps the naïve one, is much more tenable than any idea of a monopoly seeking to increase incomes. No doubt restriction on entry is desirable from the point of view of the existing physicians, but the public pressure needed to achieve the restriction must come from deeper causes. (Arrow 1963, 966)

However, in a footnote, Arrow acknowledged the difficulty of assuring quality through the regulatory licensing of professionals. As to the ability of licensing to reduce uncertainty about quality, he wrote:

How well they achieve this end is another matter. R. Kessel points out to me that they merely guarantee training, not continued good performance as medical technology changes. (Arrow 1963, 966)

In addition, Arrow expressed a number of other concerns about state licensing.

Both the licensing laws and the standards of medical-school training have limited the possibilities of alternative qualities of medical care . . . [that might] appeal to different tastes and incomes. (Arrow 1963, 953).

[restrictions on entry to the field have] constituted a direct and unsubtle restriction on the supply of medical care. (Arrow 1963, 955)

The licensing laws . . . exclude all others from engaging in any one of the activities known as medical practice. As a result, costly physician time may be employed at specific tasks for which only a small fraction of their training is needed, and which could be performed by others less well trained and therefore less expensive. (Arrow 1963, 957)

the present all-or-nothing approach could be criticized as being insufficient with regard to complicated specialist treatment, as well as excessive with regard to minor medical skills. (Arrow 1963, 967)

Despite how often it is cited in favor of physician licensing, Arrow's article offers little to public policy makers trying to decide if licensing makes sense. He catalogs the ways in which health care markets depart from perfect competition and presumes that some sort of government intervention would improve upon a market outcome. He hedges this conclusion with numerous comments on the inefficiencies of licensing

regulations in the United States. Arrow does not make a clear case for or against licensing doctors.

Weingast (1980) who, like Arrow, asserts that information asymmetries are a problem for consumers of health care, argued that state licensure is not the solution. He wrote: “[the] political solution to the market inadequacies fails for precisely the same reason the market failed in the first place—the informational asymmetries” (93).

In their 1989 paper, Graddy and Nichol express the belief that information asymmetries present in health care markets require some degree of regulation. Like Weingast, they do not support licensure as it exists.

Consumers should be protected from incompetent providers, but should otherwise be able to choose among different price/quality options which may satisfy individual preferences. (Graddy and Nichol 1989, 614)

Graddy and Nichol do not specify the ways in which they would revise existing licensing statutes to increase choice in medical markets, but other economists, quoted below, have some ideas.

### LICENSURE VS. CERTIFICATION

Many economists prefer certification to licensure.

Under certification buyers have a wider range of choices . . . they can buy low-quality goods or services if they wish. (Leland 1980, 283)

The case for licensure presumably rests on the proposition that the consumer is a poor judge of the quality of medical care and therefore needs guidance. . . . Assuming this to be true, the need for guidance could be met by voluntary *certification* rather than compulsory licensure. . . . Under a certification system patients would be free to choose the level of expertise that they wanted, including uncertified practitioners. (Fuchs 1986, 19)

As long as certified personnel are available, economic models suggest consumers will not gain as a result of replacing certification with mandatory licensure unless there are some sort of problems with market failure which go beyond difficulties simply in identifying qualified personnel. (White 1987, 32)

Even if entry controls do improve quality, that improvement can be purchased far more cheaply via certification of professionals, rather than through licensing. Consumers would then be able to choose between high-quality, high-priced services and lower quality at a lower price. (Beales 1980, 140)

The efficiency case for licensing can be made only under restrictive conditions—when market failure cannot be remedied by private exchange (such as by certification and advertising) as costlessly as it can be remedied by government identification and the outlawing of incompetent and unscrupulous practitioners. No study has yet been produced by the economics profession that makes a case, on cost-benefit grounds, for the licensing of any profession. (Elzinga 1980, 114)

Two arguments for licensure over certification carry little weight with economists. The first is that consumers need the government to make decisions for them. This does not go over well, as most economists recognize that the government can not begin to speak for the tastes and preferences of millions of individuals—the private market allows the expression of those tastes and preferences. It is this variation in tastes, in fact, that generally leads economists to favor a system of registration or certification, under which consumers make choices for themselves.

A second argument in support of licensure over certification is that there are externalities associated with the consumption of low quality physician services (Moore 1961). The issue here is that, if a consumer purchases incompetent care and a contagious disease is misdiagnosed, others will suffer. In the United States, however, a bigger problem appears to be people who do not purchase care at all. Eliminating licensure would

make care cheaper and more available, encouraging many of those who do not currently seek care to do so.

A final justification for licensure over certification suggests that licensure reduces agency costs in the market for physician services. By restricting entry and, therefore, increasing the profitability of medical practice, licensure creates incentives for physicians to act with the best interests of their patients in mind. With greater profitability, physicians have more to lose if they engage in malfeasance. This efficiency wage argument for licensure over certification is outlined by Svorny (1987). The incentive effects of a loss upon malfeasance have been mentioned elsewhere.

licensing may serve to protect consumers . . . by providing an asset, namely the license itself, that may be seized in the event of negligent performance. (Shapiro 1986, 861)

As one would expect, the more ethical wealth that one must forego as a result of being discovered reducing quality, the less likely is the reduction in quality. (Blair and Kaserman 1980, 194)

However, no one has yet made the case that information costs are sufficiently high enough to justify the inefficiencies associated with government intervention over those of the market.

## PROPOSALS FOR CHANGE

As the above discussion indicates, at the least, economists favor reducing the power of the American Medical Association over state licensure. In that vein, Rayack argues to replace profession dominated licensure boards by “responsible administrative agencies.”<sup>2</sup>

The social acceptance of licensing in medicine indicates a general belief in the desirability of providing protection of

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<sup>2</sup> The economics literature on regulatory capture suggests that shifting power from the AMA to administrative agencies reporting to state legislatures would continue to leave the process subject to AMA influence.



the consumer through the maintenance of standards. . . [a moderate] approach is possible whereby AMA power can be curbed and at the same time socially acceptable medical standards can be maintained. (Rayack 1982, 425)

Also, to reduce the influence of medical professionals, Blair and Kaserman suggest separating the functions of the board into regulating product quality and regulating competition.

in situations requiring self-regulation by members of the profession . . . the attainment of a socially optimum outcome may require the existence of more than one regulatory body with a separation of goals: self-regulation of product quality with external regulation of competitive practices. (Blair and Kaserman 1980, 197)

Gaumer (1984) advocates “reforms of the exclusionary and self-serving aspects of credentialing” (410) by means of changes in administrative processes and practice constraints. He expressed support for efforts to group related health professionals together on state boards to internalize “state manpower planning concerns, interoccupational conflicts, and service delivery productivity losses” (409).

Also to reduce the influence of physicians over licensing decisions, Svorny and Toma (1998) suggest shifting the source of state medical board funding away from physician fees to the state legislature. Controlling for other factors, they find that the influence of physicians over board actions is less in states where boards are funded by the state legislature.

Feldstein proposed “specific-purpose licensure.”

Specific-purpose licensure would mean that not all physicians would need to take the same educational training, training in some specialties would take a much shorter period of time. . . .When a physician wants an additional specific-purpose license, he or she could receive additional training and then take the qualifying exam for that license. The training requirements for entering the medical profession would be determined not by the medical profession, but by the demand for different types of physicians and the least-cost manner of producing them. (Feldstein 1994, 190-191)

In the third edition of his health economics textbook, Feldstein (1999) refers to this as “task” licensure, making the point that licensing physicians to perform specific tasks would lower the cost of a medical education (396).

Even Evans (1980), who advocated “an extensive regulatory web . . . to constrain the [health care] industry” (263) opposed state licensing regulations in which physician groups are given power to influence entry and practice patterns. Evans argued that the “collective self-regulation of processes of service production, as well as of the economic behavior of professional firms, must be weakened or removed” (260). He imagined that “public regulation of a more sophisticated type would still be needed to substitute for the quality control provided by self-regulation” (259).

Not one of these proposals, however, can be clearly put in the camp of significantly liberalizing the regulation of physicians. Their tenuous joint premise is that the actions of a reconfigured regulatory arrangement would be an improvement over the current situation and an improvement over market outcomes.

Others favor liberalization of medical licensing regulation, such as a switch from licensure to simple certification.

Licensing regulations can be quite restrictive . . . certification and registration systems represent lower degrees of regulation. More research into classifying degrees of manpower regulation, and matching those with the need for regulation, would be fruitful. (Begun and Feldman, 1990, 97)

[Under a system of certification rather than licensure] If we are wrong and no consumers want lower quality at lower prices, the substitution of certification for licensure would have no effects—the market would effectively make certification mandatory, much as licensing does today. The risks of certification are therefore very low. Combined with output monitoring, the risk can be reduced even further. (Beales, 1980, 140)

there could be several grades or categories, and periodic recertification would be more practicable (and less threatening) than periodic relicensure. (Fuchs 1986, 19)

Based on their findings of negative selection in licensing status among immigrant physicians in Israel, Kugler and Suaer (2004) suggest a direction for future policy.

The policy implication...is that lowering the direct costs of acquiring a license may raise physician quality. (Kugler and Sauer 2004, 28)

Seldon, et al. (1998) advocated supply side efforts to resolve the problems in the market for physician services.

The government could increase market competition by encouraging increased admissions into medical schools . . . by loosening visa restrictions imposed on foreign-trained physicians . . . [and by encouraging] the use of primary-care providers such as nurse practitioners. (Seldon et al., 1998, 820)

Goodman and Musgrave (1992) expressed support for shifting control over purchasing health care from third-party payers to consumers:

Some physicians do abuse patients and payers by overbilling. A smaller number do practice bad medicine . . . If patients controlled their health care dollars and were more involved in medical decisions, there would

undoubtedly be fewer instances of overbilling and unnecessary procedures. (297-298)

Professor Friedman's prescription for medical markets is straightforward: "licensure should be eliminated as a requirement for the practice of medicine" (1962, 158).

Feldstein (1999) echoes this sentiment:

It appears that reliance on a competitive health care market might well be the most useful approach to improving physician performance and providing consumers with the necessary information to make informed choices. (Feldstein 1999, 397)

In the course of the last thirty years, the emergence of health maintenance organizations and commercial interests in health care have changed the market for physician services dramatically, leading some economists to have even more confidence in private markets as opposed to government regulation.

One potential benefit of increased commercialization of medicine is in [the] area of quality control. The threatened loss of institutional reputation because of poor quality controls would provide incentives to monitor systematically and to alter practices when appropriate. (Benham 1991, 90)

[Changes in] knowledge about quality of medical care and ability to monitor quality . . . [and] the more extensive activities by purchasers of care . . . are likely to diminish the relative importance of licensure as we know it today. (Ginsberg and Moy 1992, 33)

Svorny (2003) identified changes in liability and technology that make licensing regulations increasingly redundant to market forces:

It is reasonable to ask whether . . . 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 . . . 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 reasons, it becomes ever more difficult to justify state licensing and the continued funding of state medical boards. (Svorny 2003, 155)

## CONCLUSION

Despite the wide reach of medical licensing in health care production through its impact on the nature and cost of care, it has been all but ignored in debates over health care reform. As the above discussion indicates, many economists view licensing as a significant barrier to effective, cost efficient health care. State licensing arrangements have limited innovations in physician education and practice patterns of health professionals.

Some states have moved to reform their scope-of-practice laws, suggesting a direction for other reform-minded states. This includes an expanded scope of practice for paraprofessionals, allowing them to take on some tasks previously restricted to physicians. In many states paraprofessionals have been allowed to work fairly independently and are permitted to prescribe medication.

Consumers would benefit from a regulatory environment in which health care provider organizations and hospitals are free to employ health manpower in flexible ways and medical training is offered in a variety of forms. A rigid four-year curriculum is not necessarily the only good way to train physicians for a variety of tasks. Nurses and other health professionals, whose skills develop, can be moved sequentially into increasingly difficult practice situations without having to sit in classes that ostensibly "assure" their knowledge of appropriate practice patterns.

There are many ways to train competent health care providers. The existing, rigid rules severely limit entry and constrain health care providers from innovations in manpower use that could increase services and lower health care costs in the United States.

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