Issues in Health and Medicine

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criticism of the U.S. healthcare system is coming from consumers,
s, the media, activists, and healthcare professionals. Critical Issues in
ıd Medicine is a collection of books that explores these contemporary
s from a variety of perspectives, among them political, legal, historical,
cal, and comparative, and with attention to crucial dimensions such as
ıder, ethnicity, sexuality, and culture.

History and Health Policy in the United States

Putting the Past Back In

Edited by
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Chapter 3

Rosemary A. Stevens

Medical Specialization as American Health Policy

Interweaving Public and Private Roles

Life usually doesn't just dump truth on your plate, neat and simple. It usually comes with a side of nuance, garnished with paradox.

Chris Satullo, *Avoid the Dreaded Either/Or—Seek the Sweet Bird of Paradox*

What is health policy? On the face of it, there seems a simple answer. Health policy is what governments do, or try to do, to further health care, typically at the national level. As other essays in this volume resoundingly attest, however, seeing health policy only as what government does or fails to do gives a blinkered, partial—and much too tidy—view of the rich, complex, and constantly shifting landscape of health policy in the United States. I want to suggest some of this complexity, nuance, and paradox by examining specialization in American medicine as a vital, yet often neglected, policy issue.

Public and private policy making have long been entwined in American politics. Specialization weaves together several histories: the history of government, to be sure, but also the histories of science and technology, the medical profession, health care, business, consumerism, and other more generic historical fields. I concentrate here on the history of the U.S. medical profession, which is now formally structured—through education, examination, and certification—into thirty-seven primary specialties and ninety-two subspecialties

(with more under way). New historical interpretations of the profession are overdue. This is also a particularly important time to reconceptualize the policy role of the medical profession in setting standards in the information-oriented health-care system of the twenty-first century.

In the last quarter of the twentieth century, ruling narratives within the scholarly and medical communities included the rise and current decline of the medical profession, and thus gave negative interpretations of the social role of medicine as a profession. In turn, such perceptions obscured the very real challenges faced by professional organizations, particularly their roles as public agents (Stevens 2001a). Yet, as this chapter shows, during this same period professional organizations in and across the medical specialties struggled successfully to create and legitimate new fields of medicine through a process of private negotiation and organizational consensus—influenced by related government policy but outside the realm of government. Today, twenty-four medical specialty boards, each sponsored by national specialty associations in the field of interest, certify almost ninety percent of all practicing physicians in the United States. For a list of the boards, see Table 3-1 at the end of this chapter.

Through their umbrella organization, the American Board of Medical Specialties (ABMS), these boards embarked in 2000 on a new policy to require board diplomates to not only demonstrate current knowledge in their chosen field but also fulfill specified curricula for life-long learning, periodic self-assessment, and peer and patient assessment as a condition of maintaining board-certified status. (I have served as a public member on the ABMS since 1999.) The formative history behind this movement is part of the larger evolution of medical specialization as a central—if hidden or implicit—theme in American health policy from past to present, coloring options for the future.

These specialty certifying boards, and medical professional organizations in general, have been surprisingly silent in public debates. It is useful to consider why this is. How might professional groups participate more fully in health policy in the future? Should they?

Twentieth-Century American Medicine: Two Overlapping Reform Movements

Specialization as a movement was evident well before the famous Flexner report (1910) became the symbol of reform in American medicine in the early twentieth century.[1] Historians have paid considerable attention over the years to the success of the "Flexner reform movement" as the exercise of professional power: in defining the American Medical Association (AMA) as the central professional institution for organized medicine, a position it held up to the

1960s (Burrow 1963; Fishbein 1947); for demonstrating, in a nation unwilling or unable to enact governmental health policies, the political role of private institutions in effecting social change—not only the AMA, voice of an autonomous profession, but also the charitable foundations that supported professional reform with money drawn from profits in commerce and industry (Brown 1979; Starr 1982; Berliner 1985); and for forming long-lasting, cherished characteristics of America's medical schools as "academic medical centers"—elite, scientific, post-baccalaureate institutions, symbols of a technologically advanced nation (Ludmerer 1985; 1999; Stevens 1971).

But while the Flexner report publicized the enormous variations (and often horrifying deficiencies) in the scientific and clinical quality of America's medical schools in the first decade of the twentieth century, the reform movement paid little attention to what was happening at the same time in medical practice. Professional reform in the early twentieth century was based on the goal of achieving professional *unification* through specifying and enforcing standards for medical education and licensure. Medical licensure, both then and now a function of the states, designated basic standards to be met by all practitioners—no matter whether their field of interest was the eye, the ovary, the psyche, or the skin. It was essentially designed for general practitioners. Difficult, fractious questions of specialism, in contrast, promised a new *fragmentation* within the profession—which would, in the longer run, generate a second movement for professional reform. The two movements coexisted between 1900 and 1920, one coming to fulfillment, the other just beginning. Leading medical professors, who were specialists, led both movements.

In the early twentieth century, a slick city specialist with minimal if any specialty credentials could hold himself (for they were almost entirely male) out as a gynecologist, dermatologist, neurologist, ophthalmologist, otolaryngologist, orthopedic surgeon, or urologist, or, for that matter, as a specialist in rheumatism, fever and catarrh, or hair and complexion (Zeisler 1901)—free to cure or inflict damage on his patients. One Illinois physician declared that the motto of the successful surgeon was: "Practice strictly limited to profitable cases" (Reid 1908).

Besides an initial lack of standards for specialty training and credentials in the United States, there was no enforceable, formal relationship between general practitioners and specialists such as was developing, for example, at the same time in Britain, where national health insurance legislation (1911) shored up the position of the general practitioner as the patient's designated primary doctor (Stevens 1966; Honigsbaum 1979; Weisz 2005). Some American general practitioners limited their practice on scientific grounds, choosing

to refer patients to specialists in well-developed fields such as ophthalmology or abdominal and gynecological surgery. There was no defined role for general practice; no effective mechanism to dissuade patients from seeking specialists unnecessarily (from the medical point of view); no standards by which patients could choose well-trained or even minimally competent experts; and, with some notable organizational exceptions such as the Mayo Clinic, practically no coordination among the parties involved.

Did the lack of standards for specialized skills matter? This is a fair question from today's pro-market perspective but irrelevant in the context of the early twentieth century. If one saw medicine, as did thoughtful physicians, journalists, and others of the time, as a science or form of engineering, and thus as naturally associated with standardization and precision as the Rockefeller Institute's pristine research laboratories or Ford's mass production of automobiles, then the question never arose. It was assumed that standards mattered. The motto of the private, nonprofit, professionally engendered National Board of Medical Examiners (established in 1915 to provide a voluntary, national examination for new doctors that states could endorse for licensure) was both progressive and noncontroversial: "Ever More Exactly," signifying a precise, standardized direction for medicine. Illustrating public and private cooperation in pursuit of common policy goals, six senior federal officials were founding members of the fifteen-person National Board, including the surgeons general of the Army, Navy, and U.S. Public Health Service. Meanwhile the state licensing boards were pressing for uniform standards for all medical licenses across the country (Stevens 1971). General medical education and licensing were on an apparently irrevocable march toward bureaucracy and control.

Medical practice, in contrast, was messy and market-driven. By the late 1920s, tonsillectomies and adenoidectomies (necessary treatments in those pre-antibiotic days), hospital-based childbirth, and other surgeries were part of the middle-class American experience. With its well-educated medical profession (at least among the younger generation of doctors), successful surgeries, and gleaming hospitals, American medicine had become a valued social and consumer good, at least for those who could afford its rising costs. Some hospitals offered lines of credit so that the purchase of a surgical operation would be as convenient a transaction as buying a refrigerator (Stevens 1989). As the American public, its entrepreneurial hospitals, and its competitive, fee-for-service medical profession joined together with verve to try new methods, drugs, and surgical solutions, the rambunctious character of American medical care was delineated. Specialism meant all-out competition among physicians,

and patients became consumers with the right to consult whichever specialist they wished.

Physicians, in turn, expected to admit their patients to the hospital as they saw fit. Hospital trustees and managers had little interest in antagonizing doctors, for doctors were, after all, the source of hospital patients, particularly those patients who paid. By mutual consent there was a "gauze curtain" between managers and physicians (Thompson 1985); that is, they held themselves aloof. Each was mutually suspicious of the motives of the other—a phenomenon that has unfortunately continued to the present.

The American College of Surgeons, created in 1913, three years after the Flexner report, offered surgeons a new national professional institution and new sources for professional reform. It joined a growing body of specialty associations, journals, medical school departments, professorships, and designated hours in the medical curriculum. Among the college's other activities, it embarked on reforming the technical, qualitative standards of hospitals, which like the medical schools before them were uneven, to say the least—often operating without patient records or with totally inadequate pathological diagnosis (Rosenberg 1987; Howell 1995). The college's hospital standardization program was conveniently analogous to the Good Housekeeping Seal of Approval, another voluntary program for consumers and producers that flowered in the 1920s. Both illustrated the role of noncoercive, private regulation. Today's version of hospital standardization (now known as institutional accreditation) is a direct descendant, the Joint Commission on Healthcare Organizations (for hospitals awaiting inspection, the often feared JCAHO).

What *was* medicine? On the one hand it was a science—an "attempt to fight the battle against disease most advantageously to the patient," as Abraham Flexner put it (Flexner 1910, 23), or "an art which utilizes the sciences," in the words of a later blue-ribbon commission. But it was also, remarked that commission, "an economic activity with definite relations to the cost of living, the distribution of wealth, and the purchasing habits of the people" (Committee on the Costs of Medical Care 1932, 2). Medicine was also a growing network of institutions, including huge city teaching hospitals with medical schools architecturally embedded in them, smaller hospitals that were major employers in their communities, and an increasing complex of professional organizations. Each institution brought its own agenda to the table. Well before World War II, "medicine" had multiple meanings and a variety of constituents.

The medical profession continued its own educational reforms while claiming freedom from external control for fee-for-service private practitioners,

whether they practiced as generalists, specialists, or with a generalist-specialist mix (as many did). The organizational and political consequences of specialized medicine were largely ignored. In theory ethical doctors would make sure each individual patient received the right care from the right array of practitioners, and where this turned out to be too expensive for the patient, those physicians would reduce their fees. The AMA Code of Ethics was an important symbol and vehicle of this philosophy (Baker et al. 1998). To protect ethical behavior, the American College of Surgeons made its fellows agree not to engage in "fee-splitting," that is, paying kickbacks to other practitioners for patient referrals. Some specialists were more amenable to changes that favored their own fields and patients. For example, pediatricians were crucial participants in the child-health movement of the early twentieth century, and surgeons saw the benefits of private hospital insurance in the 1930s (Halpern 1988; Stevens 1989). Nonetheless, the AMA forcefully represented the profession to the outside world. As demonstrated in the now-rich historical literature, the AMA objected strongly (and successfully up to the 1960s) to proposals for larger social and organizational change—via health-care organization and health insurance—that came from outside sources (Somers and Somers 1961; Poen 1979; Starr 1982; Engel 2002; Oberlander 2003; Gordon 2003).

The principles guiding post-degree, specialty education from the 1920s through World War II were an extension of those of the Flexner reforms: scientific subdivision of medicine into standardized, discrete fields and formal recognition and training of specialists. By 1942, twelve of the fifteen specialty certifying boards required at least three years of hospital residency training, and the movement to standardize specialty education through hospital residency programs was well under way. It was to be through efforts to identify and certify specialists (and therefore their organized specialties) that the second professional reform movement was to mature in the late twentieth century. By that time, the power of the AMA was on the wane.

Specialty Certification the American Way

Open competition between professions in the medical market prompted the formation in 1917 of the first of today's twenty-four specialty certifying boards: the American Board for Ophthalmic Examinations (today's American Board of Ophthalmology). The precipitating factor was that non-physician optometrists had organized to push for state licensing in optometry, thus claiming the eye as a legally defined field of work for themselves. Optometry was licensed in all jurisdictions by the end of 1924. Without their own qualification, medical ophthalmologists would have had no means of distinguishing themselves as specialists. Indeed, it is worth remarking in passing that fierce jurisdictional rivalries between different health professions continue to the present, not just over the eye, but also in many other fields. In August 2004, for example, a governmental directive from the Veterans Health Administration (VHA Directive 2004–045) sparked acute concern among ophthalmologists by providing guidelines for the clinical privilege of optometrists to perform therapeutic laser eye procedures at VA medical facilities.

From the beginning, a specialty certifying board was different from a state licensing board. The former was privately organized, the latter governmental. Specialty certifying boards were national rather than state-based, voluntary rather than a compulsory requirement for practice, and designed for specialized groups of doctors rather than for all practicing physicians. For the doctors, formation of a medical specialty board proved a useful vehicle for establishing medical jurisdiction. In patterns that were to recur in other specialty fields through the years, the American Board for Ophthalmic Examinations described its chief functions as establishing standards of "fitness" to practice the specialty, providing examinations to test qualifications, and conferring certificates through a purely voluntary process. The specialty diploma was not to be regarded as a license nor to control practice in the field, and ophthalmologists without the certificate were not to be regarded as "unfit."

In 1924, a second specialty board was founded along the same voluntary, noncoercive, professionally controlled lines: the American Board of Otolaryngology. This coincided with the huge volume of operations on tonsils and adenoids, often done by ill-trained practitioners. The third specialty board was the American Board of Obstetrics and Gynecology in 1930, bringing these two fields together and emphasizing the surgical aspects of obstetrics. The fourth was the American Board of Dermatology.

The flowering of the specialty boards as a new professional movement happened at the same time as the economic pressures of the Great Depression, and was in essence part of it. The economics of the 1930s encouraged medical students to take hospital internships and residencies in a specialty, hospitals to offer these residencies (doctors were typically provided room and board but not paid), and doctors to claim market advantage, including designated specialty skills. Twelve of today's twenty-four specialty boards were established by the end of the 1930s.

Each board was a critical ingredient in defining the specialty in competition with other medical specialties, and each staked authoritative territorial claims. As with the earlier education reforms—and arguably *any* reform—the process was highly political. Groups of doctors claiming they were specialists

could only succeed in establishing a successful, institutionalized "specialty" if they had the strength of numbers, could make a reasonable living in the field, had a reason to get together to form a strong organization (for example around the science and technology of the field or to combat common threats), had effective leadership (typically out of the medical schools), and were able to push their claims for legitimacy in the medical schools and through the AMA.

Sometimes the character of the board resulted from strategic compromise. The American Board of Psychiatry and Neurology, for example, joined two distinct fields together, not just because a number of physicians practiced in both fields, but also as a matter of convenience. A speaker at the American Psychiatric Association in 1933 worried that if psychiatrists "sit idly by and do nothing," other groups would intervene (White 1933). Psychiatrists and neurologists recognized a common organizational interest, though they looked at each other with suspicion and wrangled over which specialty should come first in the new board's title. In the end they agreed to combine on the basis of largely separate arrangements for the two fields within the umbrella of a parent board. (The Board effectively runs as two separate boards today.)

The proliferation of specialty credentials in the 1930s raised broad policy questions of whether this fledgling movement toward specialization should be coordinated and who would be responsible for the overall organization—questions we are still grappling with today. There was no organized health-care system to provide functional (on-the-job) definitions of specialty status and standards or to prescribe the specialty distribution of doctors, either through government or private-sector initiatives. Instead the existing boards came together with other medical professional groups in 1933 to form the present ABMS (then called the Advisory Board for Medical Specialties), a kind of club of clubs. The early ABMS provided for communication among the various specialty boards. Its power rested, however, on its assumption of authority over the legitimacy of new claims. The ABMS published its first rules or "Essentials" for the establishment of new specialty boards in 1934, laying out patterns that have come down through the years. Each new board was to represent a "well-recognized and distinct specialty of medicine," to include more than one hundred specialists, and to have the support of the major specialty societies in that field and the related AMA specialty section. Obviously none of these conditions was clear-cut. What is a well-recognized field of medicine? Recognized by whom? These and other questions have generated controversy and fueled negotiations, case by case, over the years. Nevertheless, there was now a forum for wrestling with such questions—housed in the machinery of professional self-regulation.

Three lasting characteristics of the ABMS and its member boards were established by World War II:

1. In the absence of other forms of control the profession had the responsibility to approve new specialties through evaluating applications from specialist groups.
2. New claimants were to be judged by those who were already in the network—thus laying the process open to charges of cronyism and unfair competition.
3. This was a voluntary process for aspiring specialties and individual specialists. There was no compulsion for any specialty group to seek ABMS approval or for any doctor to be "board certified." Any group might call itself a specialty certifying board subject only to common legal strictures, such as fraudulent representation or trademark infringement.

Nevertheless, ABMS approval carried (and still carries) prestige for a specialty, ratified and opened doors to designated hospital residency education and funding programs, and was a valued credential when used by health insurers, hospitals, and now by medical licensing boards. Once inside the charmed circle of approval as a member board of the ABMS, there was little motivation to standardize specialty certification (until recently) or to consider its overall effects.

Specialization as National Health Policy

By the mid-1940s, when historian George Rosen published a classic study of medical specialization, the topic was ripe for investigation. Specialization was an "essential feature of modern medical practice"; there were more self-styled (full-time and part-time) specialists than full-time general practitioners in the United States, though only a minority practiced their specialty full-time (Rosen 1944; Stevens 1971). Status as a specialist carried social prestige and was advantageous in the medical marketplace. Rosen observed features of specialization that later experience was to make only too familiar. Social and economic factors were at least as important as scientific and technological factors in the successful establishment of specialty fields. Medical specialization thrived because of the confidence of the American public in the authority of experts and the cachet of seeing a specialist who charged high fees or offered esoteric treatments. In these and other ways, Rosen wrote, specialization intensified the social trend to see medicine as an economic transaction, at least in the United States (Rosen 1944, 77).

Specialization was changing the structure of American medicine, shifting its internal balance away from being a profession of general practitioners. Organizationally, a unified profession was giving way to one based on power blocs of specialists.

Government policy during and immediately after World War II stimulated the growth of specialty practice. Such policy was haphazard and inadvertent to be sure, but the message came through loud and clear. Doctors' massive participation in the armed forces during the war convinced them of the functional advantage of concentrated practice in fields such as neurological surgery, urology, dermatology, plastic surgery, and otolaryngology, as well as the practical advantage of credentials, which were (in the military) linked to role, rank, and pay. Leaders of the specialty certifying boards worked with the surgeons general of the Army and Navy to make sure their diplomates were appropriately assigned, and the boards expected a great expansion of residencies in the postwar years. Between 1940 and 1950, the total number of residency training positions more than tripled.

When Congress decided not to pass the Wagner-Murray-Dingle bills to establish compulsory health insurance in the 1940s, it lost an opportunity to create patterns of medical care based on general practice, a beleaguered field which might (or might not) have received powerful support from these bills. There was insufficient congressional support for the health-insurance proposals, as well as rank opposition to them by the AMA among others (Poen 1979; Gordon 2003). Nevertheless, the "what if?" prospect is intriguing. Maybe, if general practitioners had been better organized, able to see further ahead, and truly committed to their own interests, they would have supported national health insurance in the interest of shoring up their status. As it was, the medical market was left wide open to specialty practice, for there were literally no constraints to dissuade any licensed doctor from declaring a specialty in any field.

Other government actions during and after the war stimulated specialization. The federal decision to provide tax benefits for employers who established private health insurance for workers—a form of government-funded "welfare capitalism"—galvanized the growth of private health insurance organized through the workplace (Klein 2003; Starr 1982). As with other (non-health) forms of private insurance, the new plans focused on the largest risks to consumers' pocketbooks: specialized and hospital-based services, not a cozy check-up with a GP. Insurance thus stimulated specialists to woo patients and patients to seek their services. Medicare was to do the same when implemented in 1966.

Three other large-scale federal programs encouraged specialization after World War II, with lasting effects through the twentieth century. The Veterans Administration encouraged returning servicemen to enter specialized residency programs through benefits under the GI Bill. The Hill-Burton Act (1946) provided federal subsidies to build or expand community hospitals, chiefly in rural areas, creating new centers for specialized practice across the United States. And the rapid growth of the National Institutes of Health (NIH) as the national bastion of biomedical research affirmed a compelling cultural message (and the money to support it) about the value of specialized science and techniques in medical education (see Cook-Deegan and McGeary, this volume). Different institutes within the NIH also funded superspecialized research and clinical fellowships—thus adding to the growing cadres of subspecialists.

As with other aspects of national health policy in the United States, these various actions and non-actions were largely unconnected. Anyone who has been involved in the public-policy arena (now or then) will recognize the political process that led to the passage of each piece of legislation: shifting congeries of private-interest groups and legislators come together to support or oppose a cause (such as the AMA in opposing compulsory health insurance or the American Cancer Society in pushing for funds for the National Cancer Institute). Legislative agendas in health may also encompass wider, nonhealth interests, so that very different coalitions may push, for example, for veterans' benefits, rural hospitals, or biomedical research.

For scholars, the political process involved in health legislation has been tailor-made for discussions of power, ideology, and compromise, not to mention legislative failures. Less studied have been the cumulative messages embedded in the grab-bag of legislative initiatives in different periods. The forces of both federal action and inaction represent national policy writ large: to encourage trends toward specialization.

Specialty Boards as Private Policy Makers

Given this national-policy context, the role of the specialty certifying boards in the second half of the twentieth century can be interpreted from at least three perspectives:

1. National health policy delegated specialty definition to reputable private organizations that represented the exercise of responsible professional self-regulation, most boards being led by medical school professors who had served the nation well in World War II.

2. In the absence of other policy-making directives, specialty organizations seized power in order to advance their own interests, carving up medicine into fiefdoms.
3. The freewheeling medical market for specialty services from the 1950s through the present created its own specialty preferences out of a combination of consumer and provider choices, and the boards responded to the market.

All of these statements ring true. The boards also responded to strong public or private reform proposals from outside of the profession, for example in advancing the cause of family practice and emergency medicine in the 1960s and 1970s, and later in embracing the quality movement (see below).

By 1969, thirty percent of American doctors practiced full-time as surgical specialists, forty-seven percent practiced full-time in nonsurgical fields, and twenty-three percent were general practitioners and/or part-time specialists (Stevens 1971, 181) This was not necessarily an "ideal" distribution from the health-planning point of view, at a time when planning was both in vogue and supported by government funds. "Are enough physicians of the right types trained in the United States?" an official report asked in the late 1970s, suggesting more direct national influence on the distribution of medical residencies. The Department of Health, Education, and Welfare projected an oversupply of doctors in fields such as pediatrics and neurological surgery, and an undersupply in family practice and plastic surgery, among other fields, though opinions differed "as to what constitutes a sufficient supply of specialists and whether too many of certain specialists are being trained" (Comptroller General 1978). But, after all, the United States did not claim to have a planned, or even "ideal," health care system.

The incorporation and renaming of the American Board of Medical Specialties in 1970 suggested it might acquire a stronger, more unified role in the context of federal support for health manpower education and health planning in the 1970s. The new, full-time director wrote enthusiastically about a more active role in raising standards and conducting studies of the "proportionate production of medical specialists, including their relationships with members of the allied health professions" (ABMS 1974, 4). Any such effort assumed a much stronger, centralized ABMS than before. Interest in certification, expressed by government agencies and public consumer groups in the late 1970s, also prompted the ABMS to extend its public gaze, including the addition of three public members in 1978. However, thoughts of activism faded as federal planning gave way to the market orientation of national health policy

in the 1980s. Without a strong external stimulus or threat, the boards perceived no need to join forces around a common agenda if this meant giving up any of their own autonomy. Until the late 1990s, there was largely fruitless debate within the ABMS and the member boards as to what the boards represented as a collective. Was the ABMS a "federation," which implied greater power over independent boards, or was it a "confederation," a convenient meeting place for twenty-four independent units?

It was left to the specialty certifying boards, individually and collectively, to signify what a "specialist" was in terms of education and certification. Patients could look up their doctor in the ABMS *Directory of Medical Specialists* (and more recently online, www.abms.org), assuming they had heard of it. Alternatively, or in addition, a doctor could announce a specialist field of practice by choosing among a longer list of fields that appeared (and appears) under the term "self-designated specialty" in the AMA's national medical directory. His or her name was then displayed as such a specialist in the directory.

Other organizations were also in play. The distribution of training programs in different specialties and geographical regions represented (and represents) the combined actions of teaching hospitals across the United States. Teaching hospitals employ residents and pay their salaries in return for work and for the value (in imputed quality and prestige) in serving as a teaching institution. Common sense suggests that the one who pays the piper calls the tune. There has been a long, unresolved debate about how far demands for residents to staff the hospital in different fields or serve the demands of powerful medical constituencies have skewed the production of specialists toward hospital rather than practice needs.

Meanwhile, national accreditation of residency education within each specialty tightened. In 1972 a new Liaison Committee on Graduate Medical Education, sponsored by various professional medical organizations, strengthened private national oversight over the length, content, and standards of residency education in each field. This body was replaced by the Accreditation Council for Graduate Medical Education (the present ACGME) in 1981, and grew even stronger when this became an independent corporation in 2000. The ACGME, acting through residency review committees in each specialty, is organizationally separate from the specialty certification boards, and hence the ABMS, but they work in tandem and have some overlapping membership.

The organizational array may seem confusing. The net result is simple: an interlocking system of professional regulation. Every doctor in the United States went to a medical school accredited by a professional group, moved to a professionally accredited residency in an approved specialty, either did or

did not add subspecialty training in an approved field, and sat the appropriate specialty (and subspecialty) board examinations. All of these processes were linked, with overlapping membership and communication, across the various organizations.

By the end of the 1970s, the second professional reform movement (standardizing specialist medical education) appeared to be moving toward completion. The public could rest assured that a board-certified specialist had received professionally designated training and a diploma certifying standards of 'fitness" or "competence" for the field. However, at least until the 1980s, this process applied to only a minority of doctors. Specialties as a group could not claim success as reforming organizations within the house of medicine until they actually represented the "profession."

The boards were also psychologically, if not organizationally, ill equipped to reinvent themselves as consumer-oriented institutions between the 1940s and the 1990s. Moving along the path of professional reform, their vision looked inward to professional organization and improvements in specialty education. Improved quality of care for the patient was assumed, not unreasonably, to be the outcome of this process, as it had been in the first professional reform movement. Americans were not clamoring for further change in the 1980s. Indeed the general public was almost entirely unaware that board certification existed, let alone what "certification" might mean, other than a reassuring official-looking framed document among others on the doctor's wall.

The American Board of Urology provides a good example of the self-defined organizational rationale for the boards, as it appeared in 1946:

> REASON FOR APPLYING FOR A CERTIFICATE; ITS VALUE. The American Urological Association, the American Association of Genito-Urinary Surgeons, and the Section on Urology of the American Medical Association are interested in furthering the cause of Urology and have participated in the formation of this Board. They are sponsoring its activities. The various national medical societies, the public, hospital directors and others, will utilize the certification from this Board as a means of discriminating between those well grounded as specialists in Urology, and those who are not. (ABMS 1946, 889)

When (in an influential exercise of public policy) the Federal Trade Commission and the courts began to apply antitrust provisions more generally to professional institutions in the 1970s, legal caution persuaded all of the boards to limit claims for "discriminating" in the marketplace because of actual and

potential lawsuits—for example, from aggrieved doctors without a specialty diploma who claimed that the boards represented unfair restrictions on market competition.[2]

The specialty boards were private policy makers that influenced the structure, prestige, and success of American medicine between the 1940s and the 1990s. There was little recognition or call for them to play a broader role in public policy, either inside or outside of the boards.

Professionalization of the Specialty Boards

To become effective public organizations, the specialty boards had to overcome their history as elitist clubs, or at least balance elitism with highly professional methods (psychometrics) for measuring the knowledge and skills of practitioners. Over the years the boards have become sophisticated agencies for professional evaluation using the most advanced testing methods.

Balancing qualitative (objective) and professional (subjective) goals was, initially at least, tricky. One of the founders of the American Board of Neurological Surgery expressed his strong dismay at their lax, cozy examining procedures in the late 1940s, compared with the much tighter methods used by Orthopedic Surgery. "Board members are ridiculed and are accused of operating secret clubs which permit membership only to those who are 'pets' of the examiners. . . . Have we provided adequate training and conducted an unbiased examination?" (Adson 1948). The implication was that they had not.

Between the 1940s and the 1990s each board worked, with greater or lesser success, to professionalize its administrative operations and to adopt and develop the latest techniques for objective examinations in its field. Professor Howard P. Lewis, chair of the American Board of Internal Medicine from 1959 to 1961, described the early success of board certification in that specialty. When he took the board examinations in 1937, he said, his colleagues in internal medicine "just laughed at me" for wasting time. By 1952, however, certification "had become a very well appreciated indication of competency." Valued by hospitals, medical schools, and insurers, the certificate had acquired material worth, for institutions as well as diplomates (Benson 1994, 22).

But what actually *was* a board, in terms of organizational culture and administration? In the 1960s, the boards were typically low-cost operations run out of the private office of the board's president or secretary (and some still are). These offices were scattered across the United States, moving as the officer changed. The culture was (and is) decided by the unpaid members of the board. The great diagnostician Jack D. Myers, chair of the American Board of Internal Medicine from 1967 through 1970, described that board as a "small

club of about a dozen people." Another member of the board remembered it as "the finest dining club in America at the time." Oral examinations offered by the specialty boards in different hospitals across the country brought recognized specialists together for a common, prestigious mission. Examiners bonded together in camaraderie. Quoting Myers again, "The friendships, the mission of the Board, and the learning have made Board service an outstanding part of their careers" (Benson 1994, 54, 68, 56).

The specialties and subspecialties had examining structures that were largely isolated from each other. The specialty boards were autonomous corporations. With time, they became increasingly independent, both from each other and from their sponsoring specialty societies. "We were ferociously independent," recollected a member of the American Board of Internal Medicine. "We felt that independence was the only way we could maintain impartiality and avoid being influenced." Each subspecialty, in turn, developed its own culture and sense of camaraderie within the board system, and where relevant, in relation to its own sponsoring groups. In the 1950s, the subspecialty board chairs in internal medicine did not even meet with the parent board. Each group assumed without question that it was furthering responsible, professional self-regulation (Benson 1994, 23, 37).

How much standardization there should be *across* specialties has remained a problem for decades. It involves issues of professional autonomy, real differences between specialty fields, legal challenges, and the public interest. The AMA gave the first standardization movement strong central direction. Specialty groups, in contrast, relished their independence. Just as individual specialists competed with other specialists for patients, their organizations competed to protect, expand, and modify their fields. The ABMS, representing all the boards, published a directory of certified specialists and held annual meetings for discussions of mutual interest, but remained an organizational convenience for established members rather than a powerful national professional institution. Only now are the member boards seeing collective advantage in making the ABMS a unifying, standardizing force. ABMS archives from the years after World War II show some reluctance by constituent boards to pay the assigned dues of $1 per diplomate to help support the organization. In 1947, the relatively large American Board of Internal Medicine claimed poverty and tried unsuccessfully to cap its annual contribution at $300 instead of paying the actual amount of $482 (Werrill 1947). The ABIM is now a multimillion-dollar-a-year corporate force.

The most critical function of the ABMS has been to review applications for new specialties. This is done by a joint "liaison" committee of ABMS and

the AMA Council on Medical Education. In the dance of professional self-regulation, groups of doctors claim they are specialists in a new field and deserve the full professional recognition assured by an "approved" certifying board—approved, that is, by the ABMS, representing the incumbent boards, and the AMA, representing doctors in practice. Approval of a new board rests on the strength of a formal proposal and negotiations with boards already in the system, who have clear perceptions of their own actual and would-be jurisdictions.

There were sixteen approved specialty boards in 1948, with many more contenders—in addition, of course, to general practice, which was by then a declining field. How many formal specialties should there be? In a market system we might perhaps say as many as the market would bear. Restrictive professional actions against new specialties could be labeled monopolistic and unfair. At the same time, never-ending splintering of medicine into specialties could pose serious economic and organizational problems for hospitals, where specialists are trained as residents and specialty practitioners seek staff appointments, as well as for the medical schools, which tend to recognize new fields with new departments or divisions. Splintering medicine further by adding new certifying boards *ad infinitum* would probably destabilize the existing specialty-board system, plunging it into constant turf wars, self-righteous rhetoric, and never-ending bickering. More importantly, from the public perspective, national professional regulation of specialists (the second medical reform movement) might well fail—and there is no plausible alternative in the wings.

In a remarkable show of unity the ABMS imposed a moratorium on the approval of new boards in 1949, which held firm for the next twenty years. Two more were approved before the moratorium took effect, bringing the total to eighteen (see Table 3-1). The general posture has remained conservative, reflected by the existence of only twenty-four boards today, despite years of change in the science and practice of medicine and in the organization and financing of medical care. New fields have been incorporated as subspecialties within the established boards (Stevens 2004).

Everyone a Specialist

Specialty education and certification were becoming normal practice in the United States by the early 1960s. In 1961 more than two-thirds of all active, self-reported neurological surgeons, ophthalmologists, otolaryngologists, pathologists, radiologists, and thoracic surgeons were board certified; and the average across all specialties was fifty-three percent (Stevens 1971, 545). Through ABMS approval of two new specialty boards in family practice and

emergency medicine—areas publicized by medical, political, community, and other groups as important for the health of the nation—the circle of specialization was completed. Every field of medicine was now a "specialty." Every doctor was a specialist. And the specialty boards, collectively, defined educational, if not practice, standards across the whole of medicine.

The establishment of the American Board of Family Practice in 1969 (at the time of writing being renamed the American Board of Family Medicine) broke the ABMS moratorium on the approval of new boards. It also demonstrated the power of the cultural environment to influence organizational change. The American Board of Emergency Medicine, founded in 1976 and approved in 1979 after a period of substantial hostility from established specialties, also reflected social and political concerns—in this case, about the poor service and lack of standards of emergency services in the United States.

The American health-policy establishment of the 1960s—including federal and state officials, practitioners in the growing fields of health planning and health services research (also in part federally funded), and the staff of charitable foundations and national commissions on primary care—regarded the future role of the generalist as the single most important organizational issue for the health care of the American population. General or family practice had its own professional societies, residencies, and a legitimate, if sometimes contested, place in at least some medical schools (often stimulated through state tax support). Given the evident success of other fields, self-designated family practitioners sought to advance their field through the well-established route of specialty credentials.

Most specialties and subspecialties were built around concepts of disease. In contrast, family practitioners presented their field as a professional response to growing concerns about health care in the 1960s, particularly the lack of access to primary care. Leaders in the new specialty of family practice saw themselves as involved in a more general movement for social reform, stimulated by federal and state tax funds for medical education and perhaps eventually by national health insurance. Gale Stephens used the evocative term "counterculture" to describe family practice as a counterweight to the biomedical culture of leading medical schools (Stephens 1979). Nicholas Pisacano, a major force behind the establishment of the family practice specialty board, reportedly held conversations with the ABIM as a possible home for the new field. However, that board apparently expressed no interest in including family physicians in its ranks (Pisacano 1964).

Reacting to a policy environment that was in favor of primary care, opposition among the incumbent specialty boards weakened. One influential

speaker during the approval process, William Willard, urged the gathering of ABMS and AMA representatives to "do the right thing." He also suggested there would be unfortunate repercussions if they failed to do so. If the new board were not approved, Willard said, "then I think they are going to be a rebel group in organized medicine among the general practitioner group," and this would not look good for the profession (Adams 1999, 62). Family practice leaders, in turn, were anxious not to appear as second-class citizens in terms of the scientific message they sent out. They wanted to both set rigorous standards for certification and avoid identification with old-style general practice, which was looked down upon as relatively "unscientific" in the leading medical schools. The establishment of the American Board of Emergency Medicine followed a similar course. In the early 1970s a number of doctors involved in emergency care coalesced into what one critic called a "large emergency-medicine politicoeconomic establishment." (Leitzell 1981) Despite the doubts expressed among other specialists within ABMS as to whether emergency medicine was scientifically justified or even a discrete field of practice, broader policy agendas prevailed. Board certification ratified, advanced, unified specialists, and arguably invented the specialty of emergency medicine. Emergency physicians stressed their critical role in health-service delivery by choosing an hourglass as the board's symbol, to represent the importance of time in the management of care in the emergency room. While family medicine is a specialty defined by access to and continuity of care, emergency medicine is one of time and place.

With the establishment of these boards, the array of specialties offered to medical students covered a full range of medical careers. Entering a specialty had become a routine choice. If all doctors were to be recognized as specialists, it could only be a matter of time before the profession was distributed across the very fields that were marked out as specialties by the certifying boards. This has, indeed, been the case.

The American Board of Family Practice also heralded an important professional policy shift for the role of specialty boards in the future. Family Practice was the first specialty board to impose time limits on its certificates, requiring reexamination of every candidate every ten years, instead of giving a lifetime certificate. Two other boards established such certificates in the 1970s, six in the 1980s, and one in the 1990s. While the total, ten out of twenty-four boards, was a monument to slowness, *voluntary* periodic certification was endorsed as an alternative by all the boards in 1982. A major problem of compulsory recertification for the older boards was a feeling of unfairness to younger doctors. New diplomates would be caught by time-limited

requirements, but the mass of older specialists in the same field had lifetime certificates to which they felt entitled. "Lifers" accounted for about half of all diplomates as late as 2004, varying in proportion from board to board. Nevertheless, with these moves the second medical reform movement of the twentieth century had gone well beyond the Flexner reforms into measuring the knowledge of doctors out in practice.

Family practice was largely an invention of the 1960s, as emergency medicine was of the 1970s. As a result, more so than in other fields, the fortunes of its members rose and fell with the successes and failures of the specialty in the sociopolitical milieu and what we might call the "expert" context of health care—that is, the prevailing views of the health policy establishment. Emergency physicians gained monopoly positions in hospital emergency rooms. Family practitioners were more vulnerable, for their success depended on restructuring consumer behavior that had long been encouraged in the medical market, away from disease-centered or organ-specific specialties toward comprehensive advice and primary (even managed) care.

The mood of euphoric idealism that distinguished the establishment of Family Practice turned to gloom as the 1960s "counterculture" and the resources of government were overtaken by political conservatism and market-oriented messages in the late 1970s (Stevens 2001b). The managed care movement of the 1990s attempted to reinvent primary care through rules incorporated into private insurance—notably, recognition of physician "gatekeepers" and rules for specialist referrals—but this effort largely failed (see Gray, this volume). Emergency physicians have been critical participants in the development of first-rate trauma services and are necessary to fulfill expressed public desire for on-call medical care twenty-four hours a day, seven days a week, in hospital emergency rooms. Today the specialties of both primary and emergency care are once again in "crisis" (see Hoffman, this volume). Outside the hospital, consumers still flock to specialists.

The Growth of Subspecialties

As the number of specialties remained relatively constant, the number of subspecialties grew. Subspecialty education, via a hospital residency or university fellowship, follows a period of education in a primary specialty (such as internal medicine). The method for approval of a subspecialty mirrors that of new primary boards; each requires a formal, written presentation, debate, and ABMS imprimatur. In recent years much of the work of ABMS as designer of American specialty divisions has thus shifted to considerations of claims for approval of subspecialty certificates.

The subspecialties themselves are not new. Three of today's ninety-two subspecialties were formally approved in the late 1930s, and all fell within the American Board of Internal Medicine: gastroenterology, pulmonary disease, and cardiovascular disease. Pathology sprouted subspecialties in the 1940s and 1950s: neuropathology, medical microbiology, chemical pathology, hematology, and forensic pathology. Psychiatry first issued certificates in child and adolescent psychiatry in 1959; Pediatrics, for pediatric cardiology, in 1961. Ten subspecialties went into business before 1972, eighteen in the 1970s, seventeen in the 1980s, twenty-eight in the 1990s, and so far nineteen in the 2000s. Since medicine is constantly changing, many more claims are to be expected in the future.

To some extent one can trace new developments in medical science and practice over the years (and sometimes cultural and market interest in newly defined medical problems) by charting the course of the approved subspecialties. Among the fields that appeared in the 1970s were endocrinology, oncology, and pediatric surgery; in the 1980s, critical care, geriatric medicine, and clinical immunology; in the 1990s, sports medicine, interventional cardiology, vascular and interventional radiology, and medical toxicology; and in the early 2000s, pain management, developmental/behavioral pediatrics, and plastic surgery within the head and neck.

The rapid growth of overlapping subspecialties from the 1970s challenged boards with interests in competing areas. The American Board of Internal Medicine offered six additional subspecialty certificates in 1972–1973, and reorganized its field conceptually and organizationally into general internal medicine and subspecialties. General internists competed head-to-head with family practitioners in primary care. Increasingly, too, a proposal for a new subspecialty by one board might engage the territory claimed by others. Fundamental questions had become conceptually problematic. For example, if each doctor was a specialist, was that individual also necessarily a generalist? How were generalism and specialism to be negotiated within the overall board structure? Was medicine a set of scientific divisions or of practice roles or of neither of these? And what did any of these terms mean?

Pediatricians, like internists, wrestled for years with the future of their field as a general specialty or as a collection of experts in different fields whose primary connection was the care of children. Pediatrics sheltered three subspecialties in 1973, but these seemed limited in function to highly trained pediatric consultants, rather than career choices for the average practitioner. In fields like pediatric nephrology, pediatric hematology-oncology, and pediatric cardiology, certification could be seen as the badge of an esoteric specialist,

someone who had completed a subspecialty fellowship and was working at a major children's hospital. The role of subspecialties became more problematic as they blossomed within different certifying boards. As with the earlier development of the primary boards, the subspecialties had a domino effect. Contextual changes and public visibility of a particular field might lead that specialty's board to recognize a subspecialty, making it difficult for a second board to resist making a similar move, whatever its philosophy of nonproliferation. Oncology was a good case in point. The ABMS approved oncology as a subspecialty of internal medicine in 1972, of pediatrics in 1973, and of gynecology in 1974. The movement for subspecialties was thus pushed in two ways: by groups within a wider field (such as geriatricians in internal medicine or pediatricians specializing in adolescent medicine) and as part of a reaction to an emerging field by multiple boards.

The latter is well illustrated by the increased importance of intensive and critical care in the 1970s. Advocates of critical-care medicine as a defined field achieved recognition of the subspecialty under the auspices of several different boards, including anesthesiology, pediatrics, internal medicine, OB/GYN, and surgery. Newly visible fields like geriatrics, sports medicine, toxicology, pain management, and adolescent medicine sparked the natural interests of more than one board. Five boards came to offer immunology as a subspecialty, four boards sports medicine, and so on. With the expansion of knowledge across traditional specialty boundaries, the definition of a "specialty" was not as clear-cut as it once seemed to be.

Professional Responsibility and Public Policy

Left open was a raft of new questions. In the context of an increasing critique of the authority of the medical profession in the 1970s and 1980s (Freidson 1970; Starr 1982), and increasing oversight of clinical work through the managed-care movement of the late 1980s and 1990s, the specialty boards could no longer expect to be left alone indefinitely to wrestle with their own problems. There were, indeed, problems enough: how to deal with the proliferation of subspecialties as professional societies pressed for new certificates; how to design better, secure examinations (to avoid allegations of cheating); how to give oral examinations in hospitals when major hospitals were becoming reluctant to donate their resources; how to design testing techniques to effectively measure clinical skills without the need for face-to-face examinations; and how to continue to attract the best examiners to donate their time without pay. In the 1980s, with medicine overtly regarded as "big business" in the United States, and with recertification challenged by specialty societies on behalf of their members, legal (antitrust) challenges loomed as a threat. Through the 1970s, 1980s, and 1990s each board remained fiercely independent.

The boards' administrative offices are still scattered across the country, depending on the convenience of past or present specialty leaders. Today's twenty-four boards are located in twelve different states. In the information age, this may not matter for formal communication, though in the past it undoubtedly encouraged the continuance of organizational isolationism and distrust of joint efforts, discouraged informal communication across boards, and made ABMS meetings more contentious than they might otherwise have been. Some of the boards have invested in beautiful multi-million-dollar buildings befitting their status as august, establishment institutions with a steady stream of income; others are relatively poor.

Organizational inertia among the established member boards and lack of power or resources at the center distinguished the ABMS into the 1990s. However organizations, like individuals, tend to band together in the face of common threats. In the late 1990s groups outside of organized medicine expressed concerns about the competence of physicians. These included groups interested in quality measurement, the overall quality of care, medical licensing for practicing doctors, and accreditation of organizations in health care. Responding to these pressures and recognizing an apparent shift of public interest to the question of "competence," the ABMS established an ambitious Task Force on Competence in 1998. Error in medicine became enormously visible in 1999 with the publication of an influential report from the Institute of Medicine, *To Err Is Human* (Kohn, Corrigan, and Donaldson 2000). Concurrently some states (notably Florida and Texas) have shown interest in specialist credentialing. Whether they liked it or not, the boards were thrust into the center of debates about medical quality and what it now means to be a profession. This history is still being written.

Specialty board leaders are currently moving toward common goals through the establishment of "maintenance of certification" (MOC) programs for physicians; that is the replacement (or extension) of existing certification procedures by a more continuous process of learning, evaluation, and self-evaluation over an individual's whole career. All the boards are now committed to the principle of examining doctors based on six general competencies designed to encompass quality care: patient care, medical knowledge, practice-based learning and improvement, interpersonal and communications skills, professionalism, and systems-based practice. These areas have been identified jointly by the ABMS (for continuous certification through an active career) and

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ACGME, so that graduate education in medicine, via a specialty, is standardized from an individual's graduation from medical school through retirement. The movement toward MOC is supported by numerous other organizations, including the AMA, the Federation of State Medical Boards (state licensing boards), the American Hospital Association, and JCAHO.

Many hurdles remain. While all twenty-four boards are developing their programs for implementing MOC, and while those in the lead have developed elegant and sophisticated proposals designed to place specialty certification firmly within the current health-care quality movement (see, for example, Brennan et al. 2004), MOC will be implemented in a health-care market in which many practicing physicians feel overwhelmed, overworked, underpaid, and over-regulated. Marketing MOC requires a major effort to publicize it as a successful move toward enhanced quality for patients, without imposing unfair burdens on practitioners. Currently, such marketing is falling mainly on the unpaid board members of the specialty certifying boards and ABMS, whose own hard-pressed medical schools are reluctant to recognize voluntary national professional service as beneficial. The MOC program remains divisive for certain specialties, because no effort is being made, at least initially, to require diplomates with lifetime certificates to enter MOC. Nevertheless, despite such problems, the opportunity is there for creative, responsible, and publicly useful professional change.

Yet, even in 2006, as this book goes to press, this message is rarely remarked on (or perhaps even known about) in policy debates outside of the profession. It is still possible that specialty testing and credentialing may devolve in the future to licensing boards, insurers, and employers of physicians, and that the specialty boards will cease to have a central role in quality evaluation. If so, should one care? The answer is unequivocally yes. Let us leave aside the costs for both doctors and taxpayers (and ultimately patients) if the current activities and accumulated experience of the boards had to be reproduced by organizations outside of the profession, including paying for the boards' armies of highly skilled volunteers, who create and manage policy and examinations and negotiate specialty and subspecialty fields. There will be potential benefits to patients if their doctors are seriously engaged in specified programs of lifelong learning and assessment of their skills; thus MOC offers a consumer-oriented opportunity for better care. MOC should make medicine more interesting for practicing doctors by putting them on the frontline of knowledge in their fields. Doctors could, however, subvert these opportunities by defining MOC in hostile terms, as just one more unwanted and unnecessary intrusion into their practice. Quality advocates outside the profession may also passively subvert MOC by not recognizing or supporting it. The second "professional reform" movement is now at a crucial stage.

Conclusion

Medical specialization is, and has long been, American health policy. The boards (with their sponsoring specialty associations) have become de facto public agents, with authority effectively delegated (or ceded) by government. A weaker, but related interpretation is that they are filling a policy vacuum caused by lack of government health-care policy making. This chapter shows, however, that a simple story line is insufficient to explain the centrality of specialization in American health care.

The cultural, political, and policy roles of the specialty credentialing organizations (the specialty certifying boards) changed with the growth in the proportion of doctors who became specialists; indeed individual boards have been exquisitely attuned to messages in the larger policy environment. The idea of a specialty also changed over the half-century following World War II. In the 1940s it was still possible to see a specialty as an avocation. In the 1990s the specialty was more like a brand name and the credential a property acquisition. When only a minority of doctors were full-time specialists (up though the 1950s), specialty certification could be seen as the mark of an elite group or even a clique. By the end of the century, with virtually all practicing physicians certified by an ABMS-approved specialty board, the organized specialties had come to define American medicine and to evaluate the standards of individual doctors.

In the 1940s the specialties were at the periphery of power in organized medicine; by the 1990s they were central. Exercising the privilege of professional self-regulation without government involvement, American specialty groups created and sustained a complex and evolving array of examinations based on approved residency education and began to grapple with the challenge of extending this system into one of life-long education and evaluation, from first-year residency to the end of a career.

Unlike the earlier educational reforms, the specialty movement was not centrally directed. In some ways this makes its history more remarkable than the history of the Flexner reforms. The history of specialty certification in the late twentieth century demonstrates the motivating strength of two cultural beliefs: that a standardized, educated profession serves the public and that the provision of national standards is a hallmark of an organized profession. Whether these beliefs and assumptions continue to be held by the public or indeed by the profession and how far they are accepted, rejected, or ignored

by the larger health establishment, consumers, and/or the general public are policy questions for today.

Is this history a story of success, demonstrating responsible self-regulation, and thus offering a good, as well as a strong example of public-private regulation? Perhaps. Much depends on what happens next. Some scholars have recently stressed the rising social importance, even the ascendancy, of the professions as a whole (Perkin 1996; Freidson 2001). In the world of health care, in contrast, the rising authority of managers and other health-care experts has challenged that of doctors, and the sources of the profession's "reduced legitimacy" have been documented (Schlesinger 2002). The history of specialties is one of power plays: the exercise of professional dominance over segments of the medical machine and a means for specialties and specialists to attain market power (Starr 1982; Light 1988; Light and Levine 1988; Halpern 1988; Larson 1977). Specialty boards are at the same time competitors, monopolists, and public heroes.

My interpretation of the history of specialty certification as the second professional reform movement of the past hundred years or so—the first being the Flexner reforms—recognizes the importance of specialization in the history of the American medical profession. The specialty-board movement could be described in other ways. Turf-war stories, riven with internecine conflict, would make a dramatic central narrative. Specialty formation could (and should) be put more firmly into the context of patient care, of changes in scientific practice and technology, and developments elsewhere in American culture, politics, and economy. Government "manpower" and funding policies deserve close attention in relation to professional development. Even the "rise and fall" story could be brought usefully to bear on the decline of the AMA (in membership at least) and the rise of specialty organizations. Viewing the history of specialties as part of the longer history of professional policy making, education, and standardization has, however, both strategic and scholarly resonance in our present.

The Flexner reforms succeeded because various interests aligned, including members of leading medical school faculties, state licensing boards, the AMA, federal bureaucrats, and experts on quality methods (standardization) in disparate cultural and commercial fields. Today's specialty certifying boards have achieved a remarkable unanimity of purpose. Yet the standardization movement for specialty education represented in MOC is fragile. The volunteers who make certification work have taken on the huge additional assignment of MOC at a time when demands on faculty and practitioner time are heavy. Lost reimbursable time because of extensive voluntary work, such as

Table 3-1 **Medical Specialty Boards Approved by the American Board of Medical Specialties by Date of Approval**

	Incorporated	Approved
American Board of Ophthalmology	1917	
American Board of Otolaryngology	1924	
American Board of Obstetrics and Gynecology	1930	
American Board of Dermatology	1932	
American Board of Pediatrics	1933	1935
American Board of Radiology	1934	1935
American Board of Psychiatry and Neurology	1934	1935
American Board of Orthopedic Surgery	1934	1935
American Board of Urology	1935	1935
American Board of Pathology	1936	1936
American Board of Internal Medicine	1936	1936
American Board of Surgery	1937	1937
American Board of Neurological Surgery	1940	1940
American Board of Anesthesiology	1938	1941
American Board of Plastic Surgery	1937	1941
American Board of Physical Medicine and Rehabilitation	1947	1947
American Board of Preventive Medicine	1948	1949
American Board of Colon and Rectal Surgery	1935	1949
American Board of Family Medicine	1969	1969
American Board of Thoracic Surgery	1950	1970
American Board of Allergy and Immunology	1971	1971
American Board of Nuclear Medicine	1971	1971
American Board of Emergency Medicine	1976	1979
American Board of Medical Genetics	1980	1991

Source: American Board of Medical Specialties

Notes

The American Board of Medical Specialties (ABMS) was established in 1933. Boards established before then were founding members.

Present titles of boards are given. Each board also formally includes Inc. after its title.

Five boards offer more than one primary certificate; for example, Psychiatry and Neurology offers three certificates: in psychiatry, neurology, and neurology with special qualifications in child neurology.

Eighteen of the boards offer subspecialty certificates following general certification in the specialty and approved additional training. The boards not currently offering subspecialties are Colon and Rectal Surgery, Neurological Surgery, Nuclear Medicine, Ophthalmology, Thoracic Surgery, and Urology. Half of the 92 subspecialties reside in three boards: Pediatrics, Internal Medicine, and Pathology.

board service, is more difficult to justify to partners, hospital or university employers, and other interested parties than it was in earlier years, when medical fees were more flexible and professional service carried more prestige. Perhaps of more importance, other obvious interests are not (yet) fully lined up—notably the growing ranks of managers and policy and quality experts. The success of MOC may well depend upon their understanding of its goals, their enthusiasm, and their support as part of the present quality movement.

For each group, interpretations of history affect action in the present. The health-services management and research communities have long seen the physician community as the "other" and the relationship between them as one of public-private confrontation (the AMA's opposition to government health insurance, for example) rather than mutual cooperation to improve health care for the future. Meanwhile the medical profession has long assumed that professional responsibilities, including medical education and certification, are no one else's business. Indeed, the reason that MOC is as yet so little known or, alternatively, discounted as a public-policy initiative may simply be the continuation of these two mind-sets, drawing on different historical conceptions of the present. Both are overdue for change.

Yet, if this second professional revolution fails—and it might without strong external support—who in the specialty-driven medical marketplace of the United States will step up to examine, educate, encourage, improve, and maintain certification of the three-quarters of a million doctors in training or in practice in 130 or so specialties and subspecialties?

Notes

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1. Abraham Flexner was commissioned by the Carnegie Foundation for the Advancement of Teaching to investigate the profession of medicine as part of the foundation's wider inquiries into problems of higher education. Educational leaders in medicine, organized through the newly reformed American Medical Association, welcomed this spur to their own efforts to upgrade educational standards in medical schools at a time of rapid expansion in medical science, technology, and surgical skills. Early twentieth-century schools ranged from scientific institutions such as at the Johns Hopkins University to night schools and small, rudimentary, sometimes dirty schools that were run for profit by practitioners.

   Working in tandem with increased requirements for medical licensure in the states, the AMA Council on Medical Education cooperated with Flexner and concurrently rated (accredited) all the schools,. The result of these interlocking efforts transformed American medical education through the closure of schools that could not compete with new accreditation or licensing requirements, removed the earlier variety of pathways into medicine, homogenized medical education, and increasingly defined medical education as a profession to be entered with at least some undergraduate education as a prerequisite. By 1920, the United States could claim world leadership in scientific medicine. Not least, on the home front the reform movement signaled the AMA's growing authority as the voice of a unified profession.
2. Hospitals, medical schools, and insurers, however, do, of course, use board certification as a criterion for decision.

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