UpDate

UpDate is a section that will report developments in health policy issues and scheduled conferences of relevance to the field. In this issue we offer a summary of Cornell University's conference on the future of medical practice.

From Physician Shortage To Patient Shortage: The Uncertain Future Of Medical Practice

Cornell University Medical College
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America's physicians, for generations a breed apart in their capacity to protect the profession's autonomy and to realize incomes that placed them atop society's economic pecking order, are being buffeted by strong demands for reform of the traditional health care delivery system. Under mounting pressures generated by private and public third-party payers in search of a better value for their money, by a growing number of physicians, by proliferating medical technologies that are outpacing society's ability to pay, and by eroding relations with some patients stemming from the professional liability crisis, providers are reeling at the rate of change. While the shape of change is becoming more clear, where it will ultimately settle is uncertain, but it seems reasonable to speculate that the health care system is being transformed into a new order.

This was the picture that emerged earlier this year (February 27-28) at Cornell University Medical College's second Conference on Health Policy, which was entitled, "From Physician Shortage to Patient Shortage: The Uncertain Future of Medical Practice." One feature distinguished this conference from the first meeting a year ago. No one at the latest gathering expressed doubts that major change was underway. At the first conference, some participants—those who believed that government regulation, not market competition, should shape the health system's future destiny—said current changes were not of a fundamental nature.

Amidst the world of chaotic change that was painted at this year's conference, though, one sphere stood out almost alone in its seeming capacity to resist reform—the medical school establishment. But no attendee, be he or she a part of that establishment or an observer of it, doubted that major change was needed and would eventually come to medical schools as well. At one point, Frank H. T. Rhodes, president of

Cornell University, said the current medical school faculty-to-student ratio of one-to-one "will not survive for another decade, nor do I think will most freestanding academic medical centers survive either." Thomas H. Meikle, Jr., dean of Cornell's medical school, said, "the real impediment to change" is reducing the size of the tenured faculty. Other participants wondered how long medical schools could train students for specialties that may fit the needs of faculty members and teaching hospitals, but not necessarily the public. Lynn Etheredge, a former health branch chief of the President's Office of Management and Budget, said, "medical schools are galloping off in the wrong direction, emphasizing medical specialties when primary care physicians are needed." He maintained that the "overpayment of some specialists is biasing career choices," but he warned that medical students' economic expectations would be "dashed" because the financial incentives will change in favor of higher incomes for primary care physicians.

Eli Ginzberg, a health economist and director of Columbia University's Conservation of Human Resources project, organized and chaired the two-day conference. In the mix of disciplines represented, there were physicians; hospital, medical, and nursing administrators; economists; political scientists; and other assorted backgrounds. Discussions centered on issues raised by five commissioned papers that dealt with the changing nature of medical school applicants, physician practice, the future of the medical profession, the employment of doctors at a large health maintenance organization, and the oversupply of physicians in San Francisco and its environs.

The Dwindling Medical School Applicant Pool

Fueled by federal incentives that were designed to bolster the production of new physicians, American medical schools increased their number of graduates from 7,081 in 1960 to 16,318 by 1985. Even with the bountiful federal incentives, though, class sizes could not have grown unless there had also been a sharp increase in the number of young men and women who wanted to be physicians, August G. Swanson, director of the Association of American Medical Colleges' Department of Academic Affairs, noted in the conference's opening paper. In 1960, the ratio between applicants and those accepted to enter medical school fell to 1.7, the lowest in the post-World War II era. By 1973, though, the ratio had improved to 2.8 applicants for each position, a level that persisted through 1975.

In the ensuing decade, however, the number of medical school applicants declined, while the number of positions in the nation's 127 medical schools continued to increase through 1981. In 1985, there were 32,893 applicants for 17,312 positions, a ratio of 1.9 applicants per position. The

greatest decrease in applicants occurred among white males, who dropped from 32,414 in 1975 to 21,331 in 1985. They now are only 64 percent of the applicant pool, while women represent 34 percent of all medical school applicants. The size of the applicant pool is important to medical schools because the larger the pool, generally speaking, the greater the number of quality applicants. Swanson reported: "Thus far, the academic ability of medical school matriculants as measured by grade point averages and Medical College Admission Test (MCAT) scores has not declined significantly, but since 1980 there has been a slight downward shift in grade point averages."

What has changed more substantially is the economic standing of the average applicant. "There is a shift toward applicants coming from more affluent social strata," Swanson said. "In 1980, 36.3 percent of applicants' fathers were physicians or other professionals. This proportion increased to 39 percent in 1985. In 1980, 22.8 percent of applicants' fathers had earned doctoral degrees, as compared to 25.9 percent in 1985. The proportion whose fathers had not completed high school fell from 10.7 percent to 8.7 percent. Those from families with incomes of $30,000 a year or more increased from 40.8 percent to 53.8 percent, and those from families with incomes in the $5,000 to $10,000 a year range dropped from 6.4 percent to 3.7 percent. Despite this upward shift in family incomes, the 1985 applicants were more indebted. In 1980, 63.7 percent had no educational debts and only 2.6 percent had debts of $10,000 or more. In 1985, 47.4 percent had no debt and 10.6 percent had debts of $10,000 or greater."

Students Favor Medical Specialty To Primary Care

Another important change in the new physician population is a decided shift in interest away from practicing primary care medicine toward specialty care. "Comparing the responses to the Association of American Medical Colleges (AAMC) Graduation Questionnaire of the class of 1982 with the class of 1985, there is a distinct shift away from the primary care specialties, ranging from a 12.6 percent decrease in family practice to a 25.9 percent decrease in general internal medicine. The largest increases are in anesthesiology, emergency medicine, diagnostic radiology, and the medical and pediatric subspecialties. General surgery and the surgical subspecialties are relatively unchanged," Swanson reported.

Although the federal government now maintains that the United States has a surplus of physicians, Swanson noted that American medical schools have pared their class sizes only very modestly. In 1981, the entering class size of all medical schools reached a peak of 16,644. Since then, total class size has dropped at a rate of 0.6 percent a year. Swanson said he anticipates that the entering class size of 1990 will be between 13,500 and

14,000 students.

Following Swanson's presentation, Rosemary Stevens of the University of Pennsylvania declared that "it might be entirely possible that the AAMC has understated the trend. The fall-off of student interest enrolling in medical school may well be sharper. It may well become unfashionable to attend medical school. We should examine a broader range of possibilities, including some radical proposals for responding. Maybe we should think about scholarships again and other options that may not now be in vogue because of pressures to reduce federal spending." Swanson responded: "You may well be right. Proposed reductions in medical school applications of 4 and 8 percent may be conservative estimates. We have no good basis on which to predict." Paul B. Ginsburg, an economist at the Rand Corporation, described as "very encouraging news" the reduction in the medical school applicant pool. Ginsburg said society—should it decide to reduce the number of physicians in training—would be better served by having schools weed out unqualified applicants and reduce their own class sizes rather than have government use public policy processes to close entire medical schools.

Physician Personnel And Physician Practice

M. Roy Schwarz, assistant executive vice-president of the American Medical Association (AMA), depicted physicians as facing a future of opportunity and uncertainty because of the rapid changes that are affecting medical practice. Schwarz covered a broad range of subjects that will impact upon medical practice in the future, including the general economy, demand for services, health insurance coverage, accessibility to care, supply of physicians, public attitudes toward doctors, and physician fees, incomes, and expenses.

One interesting phenomenon that will influence the shape of the future for American physicians is the professional liability insurance issue, Schwarz said. How this issue is dealt with may be influenced substantially by public attitudes, but certainly no concensus has emerged among the public. Indeed, opinion surveys underwritten by the AMA have shown that, since 1982, the public has grown more uncertain about whether the number of professional liability suits and the amount of court awards that stem from some of them are justified.

The most provocative comments articulated by Schwarz revolved around the issue of medical manpower. On the subject of foreign medical graduates, "a question that haunts me virtually every day," he said, the AMA has adopted a position favoring the termination of Medicare support for the residency training of alien and American graduates of foreign medical schools. (The AMA, incidentally, has been joined by the American Hospital Association and the Association of American Medical Colleges

in supporting this position.) Schwarz said that increasingly the AMA is hearing from physicians in California, Florida, New York, and Pennsylvania about the growing supply of doctors. "The bottom line is that there are just too many doctors," said Schwarz.

Schwarz said the AMA has taken no action to reduce the number of medical students being trained, although it has sought to be responsive to its constituency by creating a Task Force on Physician Manpower to examine the many issues involved. A central reason for the AMA's reluctance to act stems from wanting to avoid any suggestion that actions on its part to influence the supply of physicians may be in violation of federal antitrust laws. "You cannot imagine how sensitive our thirty lawyers are to the antitrust issues. We can report and interpret the data on physician supply, but steps beyond that raise questions."

Etheredge, who at the time of the conference was a senior research associate at the Urban Institute, but has since departed to become an independent consultant, responded to Schwarz's presentation by expressing concern over a number of physician-related issues. Etheredge said he wondered how the quality of care was being affected by surgeons who are operating, on average, only thirteen hours a week, according to AMA data, and by doctors who, again on average, see only two to two and one-half Medicare beneficiaries a week. "I would like to underline my concerns over those issues."

Paul Ginsburg, the economist, looked on the abundance of physicians in the context of supply and demand. "Does having more physicians per capita mean that we will have higher health care expenditures? The controlled systems of care will not tolerate excessive operations or the employment of more physicians than are needed. I view as a positive development, one that we should be cautious about turning off, the abundance of physicians. I think supply and demand will equilibrate in the future," but for now government should take no arbitrary steps to cut physician supply.

Responding to Schwarz, Donald R. Cohodes, executive director of policy of the Blue Cross and Blue Shield Association, pointed to a development that was underscored by several other participants—Michael Soper, senior vice-president of National Medical Management, and Lowell Weiner, medical director of the Group Health Plan of Southeast Michigan. Cohodes said the "balance of power between medical specialists and primary care physicians is changing" as primary care doctors increasingly assume the role of gatekeeper. That is to say, patients who are receiving their care in controlled systems [health maintenance organizations (HMOs) and preferred provider organizations (PPOs)] must be referred to a specialist by their primary care doctor or face the prospect of the plan denying payment for the care rendered by the specialist. Soper, a physician who was formerly medical director of a health maintenance

organization in Kansas City, said in response to Cohodes's comment: "I think you are absolutely right. HMOs are bolstering the influence of the primary care physician and so are other forms of case-managed care."

The Future Of The Medical Profession

In a paper prepared for the conference, Rosemary Stevens characterized the American physician as in transition, "moving awkwardly, but profoundly and permanently, toward new definitions of the medical profession and professionalism in the late twentieth century; toward fundamental shifts in assumptions; and toward rearticulated roles for professional organizations. Indeed, what is exciting about the next twenty years is the growing need—indeed the demand—for a new frame of reference in which to assess contemporary changes. The professional snake is shedding its skin."

Among the important trends that Stevens cited were movement towards the organized and supervised practice of physicians, the appearance of the articulate patient, "in roles as diverse as a purchaser, a consumer of care, and a partner in medical treatment decisions, and challenges to the underlying cognitive and structural bases of medicine." Concluding what Eli Ginzberg characterized as "the first upbeat note that we have had," Stevens said: "I think that we are now in a remarkably exciting, fluid period, which may last for many years, of constant debate, negotiations, organizational and ideological adjustments, out of which a new consensus about the nature of the medical profession will emerge. It is too soon to see what this consensus will be. However, it is fruitless to see present changes as having only deleterious effects upon the profession. The future profession may well be different, but it may be equally powerful and equally successful. The key is the ability to shift from outmoded expectations and perceptions."

In responding to Stevens, Cohodes, the Blue Cross and Blue Shield representative, emphasized "the erosion" of physician discretion, declaring that "the level of intrusiveness of third parties (in clinical decision making) will only grow. That will be a very painful process." Cohodes said one force driving third parties in this direction is the wide variations that exist in medical practice patterns. "These variations are leading to medical treatment protocols." Offering another corporate perspective, Nelson J. Luria, managing director of the Health Care Finance Department at Merrill Lynch Capital Markets, charaterized medicine as "the last white-collar profession that has not consolidated. I am mystified why physicians could not adapt similarly and thrive like the lawyers and accountants have thrived." Soper offered one explanation: "a part of the difficulty is a fee-for-service mentality and the different income levels for different specialties."

Participants articulated a variety of views on the phenomenon of medical practice variations. Harold S. Luft, an economics professor at the University of California, San Francisco, said physicians are not instinctly opposed to stricter treatment protocols, but they must learn to "inculcate a budget constraint within that framework." Fred McKinney of Brandeis University said that individual consumers of care "may not want standardization. They may place greater value on personal treatment and thus variation." And Gail R. Wilensky of Project HOPE, an economist, said that practice variations "are not motivated by economics. They derive from medical uncertainty and differences in practice styles."

Employment Of Physicians At A Large Group Health Plan

Moving from the global to the more specific, Stephen C. Schoenbaum, deputy medical director of the Harvard Community Health Plan, discussed the relationship between this staff model HMO of 210,000 members and its physicians. In a staff model HMO, physicians are employed and on salary. In a group model plan, such as the Kaiser Permanente Medical Care Program, physicians are organized separately and contract to provide services to members of the HMO for an agreed upon number of dollars per member per month.

Schoenbaum launched into his paper by wondering whether the staff model HMO would survive as an organizational approach because of its complexity and its need for large sums of capital. "I really wonder whether there will be few, if any new ones, organized in the next few years. Venture capitalists want sharp profits" for their investments, and they want them long before most staff model HMOs are able to provide them, Schoenbaum said.

Schoenbaum agreed with Stevens's assessment that group practice settings represented the future direction of medical care delivery. For one thing, the group practice mode provides far better opportunities for managing the quality of care. For example, employing the information gathered through its automated record-keeping system, Schoenbaum said the Harvard plan immunized 60 percent of its members listed as being in a high-risk category. That percentage compared with a rate of 30 percent at academically based ambulatory care units that participated in a demonstration sponsored by The Robert Wood Johnson Foundation. However, Schoenbaum added, there was a threefold difference between Harvard's twelve centers in innoculating high-risk patients. "We don't have good mechanisms for achieving physician compliance" on an initiative such as this, Schoenbaum conceded.

Much of the ensuing discussion revolved around the use HMOs make of nurse practitioners and physician assistants, the degree of difficulty HMOs face in recruiting physicians, and the limited involvement that

HMOs have had in the training of new doctors. Schoenbaum said the Harvard plan employs a variety of professionals besides physicians, including nurse practitioners, physician assistants, nurses, psychologists, social workers, physical therapists, optometrists, and podiatrists. "Member satisfaction with the services provided by nurse practitioners and physician assistants is high, indeed similar to satisfaction with physicians," he said. But not all HMOs make as heavy use of nonphysician providers.

In the Arizona market, Jon Christianson of the University of Arizona said one Tucson HMO has been "very successful with a line of advertising" that declares explicitly that it does not use alternative health practitioners, but rather employs or contracts with only physicians. On the other hand, Luft suggested that nurse practitioners have been successful in California because some HMO patients are interested in more personal services. "Alternative providers spend, on average, twice as long with patients as do doctors," Luft reported.

Physician Oversupply In The San Francisco Area

Following on the more specific theme articulated by Schoenbaum, Luft and Joan B. Trauner of the Institute for Health Policy Studies at the University of California, San Francisco, discussed the professional perils of practicing medicine in that city, which has a ratio of 629.1 physicians per 100,000 population. In the course of their paper, they raised the question whether "private practice, as it has existed in the past, is endangered." Along the way, they emphasized that because of an absence of available data, their findings are based in substantial part upon anecdotal information. "At best, they provide an impressionistic analysis of practice trends in the San Francisco Bay area."

Nevertheless, Luft and Trauner pointed to a variety of physician responses to increased competition which has resulted as a consequence of an oversupply of health professionals in the Bay area. They reported increased physician advertising, a greater willingness of doctors to provide services outside of one's medical specialty and to accept patient referrals from more sources, and increased physician interest in marketing their services through participation in PPOs and HMOs. Younger physicians entering practice have also demonstrated a greater willingness to accept guaranteed income, through signing up for a salaried position, as a trade-off for the potential long-term benefits of developing their own practice.

Concluding their paper, the authors said they could discern five important trends in medical practice in the San Francisco Bay area: (1) Physicians will continue to sign up with HMOs and PPOs "on a willy-nilly basis in the hopes of preserving their patient base," but in the long run, involvement in multiple systems will tax their administrative capa-

bilities, and they will seek more efficient arrangements with fewer buyers. (2) As the "winners" and "losers" in terms of hospital contracting for PPOs/HMOs become apparent, physicians at the successful facilities will tighten up requirements for staff privileges to preserve their market dominance. (3) The tightening up of staff privileges will make entry into medical practice in the Bay area increasingly difficult for young physicians. (4) The existing oversupply of specialists will allow for a further narrowing of the income differential between primary care physicians and specialists, particularly for young physicians joining medical groups. (5) The pending mergers among a number of Bay area hospitals will ultimately lead to closure of specialized units and regionalization of new high-cost technologies; this trend will, in turn, reduce opportunities for young physicians.

In his own inimitable style, Eli Ginzberg offered a closing statement that reflected his long and broad involvement in medical affairs. On the subject of manpower, Ginzberg took note that Swanson conceded that medical school applications could fall more sharply than the 4 and 8 percent estimates upon which he based his analysis. "From my own cynical view, if medical school faculties must choose between lowering the standards of medical school applicants (in order to maintain current enrollments) or unemploying themselves (by maintaining standards but reducing class size), they'll lower standards."

Ginzberg characterized as "a public disgrace" the failure of the United States to come to grips with policy issues revolving around graduates of foreign medical schools. The inability to resolve this question, he asserted, stems from the "ineptness of Congress, states, and medicine . . . Solving this one stands as a test of what the medical establishment can do collectively." On another subject, Ginzberg said he was "struck by the fact that not one person suggested that the long medical education process from college to residency training could be cut perhaps two years" by eliminating electives and overlapping basic science courses.

Ginzberg said the medical education sphere should face up to its serious data problems, sorting out how medical education, research, and patient care are financed in the academic medical center setting. And he reiterated Frank Rhodes's expressed opinion about the current ratio of medical faculties to students, saying, "it makes no earthly sense to have a 1:1 teacher-medical student ratio." Moving on, he declared himself restive over the conflicts that increasingly engage primary and specialty physicians. "I don't like surgeons who practice only eight hours a week," he said, because that is not enough time to keep one's skills honed. Suggesting that too many medical specialists were being trained at the expense of primary care physicians, Ginzberg said, "The public can have no faith in the medical leadership if they don't train what the public needs. I don't want specialty societies to place the public at risk."

On government's determination to moderate the costs of medical care, Ginzberg said, "We've talked a good game but I don't see much progress." He noted that health care expenditures have increased from $70 billion to $420 billion over the last fifteen years." Ginzberg said that he, personally, was not concerned because he believed society could afford such an investment in its citizenry. Finally, Ginzberg said he agreed with the general sense of the conference that more attention should be paid to medical outcomes, rather than a total devotion to its cost, but he lamented that "until things absolutely have to change, they will not change. The edge belongs to the status quo."

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