

Court Ruling Helps Increase Access to Care

The U.S. Supreme Court ruling in April to let states pass laws forcing HMOs to open networks to doctors undermines a basic cost-control strategy that HMOs use to drive hard bargains with selected groups of physicians. It does so by allowing states to prohibit HMOs from limiting patient choice.

At one time, HMOs severely limited patient choice, but such tight controls have been losing favor for several years. In 1999, membership in HMOs had peaked at 81 million, and patients were moving out of tightly controlled plans into PPOs that gave them more choice and larger networks of physicians. Today, fewer than 80 million Americans belong to HMOs, while 110 million are in PPOs.

Traditional HMOs gained favor in the late 1980s by stressing low costs as a result of developing small networks of physicians and hospitals. HMOs asked gatekeeper physicians to control costs by, in some cases, paying them to limit patient access to care. But patients and physicians rebelled at such severe limits.

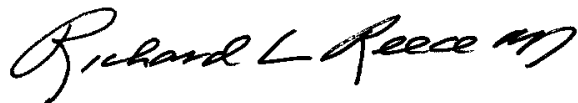
At the time, Regina Herzlinger, PhD, professor of business at Harvard Business School, commented that patients, physicians, and legislators were working together to make it impossible for managed care organizations to control costs by passing laws to restrict the ability of managed care to set limits. "The result is HMOs simply will not be able to compete as cost-effective organizations," she said. "They will have high administrative expenses and will become noncompetitive and fail."

As a result of the growth of PPOs and the enactment of laws that restrict the ability of HMOs to set limits, the issue went away, says Paul Ginsburg, an economist at the Center for Studying Health System Change, in Washington, D.C.

HMOs may be an economic success, but they are a political failure, comments James Robinson, PhD, a professor of public health at the University of California. "The strategy of giving with one hand while taking away with the other, of offering comprehensive benefits while restricting access through utilization review, has infuriated everyone involved," he wrote in JAMA.

Last year, Drew Altman, president of the Kaiser Family Foundation, succinctly put the matter in historical context: "We killed managed care, or evolved it into a form more tolerable for the American people. And nobody has a big idea, or a good idea, of what comes next."

Whatever comes next and whatever effect it will have on consumers and physicians, the Supreme Court's ruling has affirmed the right of patients to choose their own physicians.



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Author Finds Primary Care at Risk

By Richard L. Reece, MD, editor in chief

Under managed care, specialists seem to have more market clout than primary care physicians. In many cases, specialists get paid more, while the average pay for PCPs is typically among the lowest of all physicians. Yet, a new book by Fitzhugh Mullan, MD, emphasizes the importance of primary care and cautions that this critical sector of the industry is at risk.

"Over the years I have become a strong advocate for the policy and administrative medicine perspective of primary care," says Mullan. "In my opinion, any system of health care that is built on a firm foundation of primary care is going to be less expensive and more effective."

Mullan is the author of *Big Doctoring in America: Profiles of Primary Care* (University of California/Milbank Fund, New York, 2002). He is also a clinical professor of pediatrics and public health at George Washington University and a contributing editor to the journal *Health Affairs*.

An Unfriendly System

Trained as a pediatrician, Mullan spent 25 years in the U.S. Public Health Service and ran the National Health Service Corps from 1976 to 1981. Also, he served as director of the Bureau of Health Professions, the health profession's medical, nursing, and dental education unit in the federal Department of Health and Human Services from 1990 through 1995.

"When I retired in 1996, I wanted

to get back into practice and reclaim my stripes as a primary care practitioner and reconnect with the primary care community across the country," Mullan explains. He worked at the Children's National Medical Center in Washington, D.C., and at the Upper Cardozo Community Health Center in inner-city Washington. At about that time, he started interviewing PCPs, family physicians, internists, pediatricians, nurse practitioners, and physician assistants nationwide and recording the interviews on audiotape.

These interviews were designed to allow the clinicians to tell Mullan about themselves as people, as physicians, and as primary care providers. "The interviews were very interesting in terms of different practitioners' experiences, and they were very instructive in illuminating the world of primary care," Mullan notes. Of the 75 interviews he did, five were published in *JAMA* in 1998, and several others were published by *Medscape* in 1999.

For the book, Mullan arranged the interviews into five themes. "One theme is called the new GPs, representing the return to generalist medicine after the movement toward subspecialization that has occurred since the 1960s," Mullan explains. Another theme is the development of new practitioners, such as physician assistants and nurse practitioners. A third theme concerns system doctors, or physicians who have become very active with managed

care. The fourth is called "roots revisited," involving the generalist movements in internal medicine and pediatrics. The fifth theme is called "the Quixote factor," which involves physicians doing interesting and unusual work.

As a result of gathering so much oral history, Mullan provides a look forward. "I discuss in my book where the health care industry is headed and why primary care is essential to the system, but is at risk," he says.

Generalist vs. Specialist

Again and again, the book addresses the role of the generalist versus that of the specialist. The market-driven system common today is not friendly to PCPs, Mullan says.

"We have a very perplexing situation at the moment," he notes. "Unquestionably, medical science and our unfolding understanding of human biology are generating many exciting areas of highly refined clinical science. Specialization, which is a tendency in all areas of industry, is an important and useful way to deal with highly refined technologies that are intellectually and physically demanding. The problem is that when we allow the system to become increasingly fragmented, we have both relatively poor care at the center and a tendency to overuse the specialty modalities. Both of these results are inefficient and expensive, and ultimately result in poor patient care and poor population care."

Primary care practice involves

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more traditional and more standardized interventions and medication than other specialties. “In many cases, care does not involve interventions and medications at all, but rather counsel, advice, and navigation,” Mullan points out. “These are key value-added functions. And, of course, there is no commercial sector that stands to benefit from that type of care. To rein in the hyper-inflation of our health care system that is partly caused by this very effective commercial sector in health care, we need a counterbalance that provides far greater support for primary care.” A good example is in medical education, where the emphasis is on specialty care. “Specialties are more lucrative, and frankly are perceived as an easier way of life,” he explains.

Population Health

In no way does Mullan intend to denigrate specialists or specialty training. “However, what keeps most people healthy most of the time is good general medical care: good public health, good water, good school systems, good income,” he asserts. “The most important factors in population health are health-related, but not necessarily the grist of day-to-day clinical practice. Within clinical practice, good prevention, good immunization, good anticipatory care, and good management of chronic diseases keep people alive and decrease the years of productive life lost.”

Much of clinical and specialty science addresses keeping patients alive longer or under better circumstances than they would be without such care. “Of course, this is the care that we all want,” Mullan concedes. “But

a market system that will pay for that care drives clinicians and patients to pursue highly specialized care that sometimes will improve health only marginally. We should certainly have access to such services. Still, unless and until we have a good primary care base at the center of the system, covering the whole population, we are going to be paying a high price for a somewhat ineffective form of health care delivery.”

A tendency to revere heroic interventions means the American culture has not emphasized and celebrated primary care. “Furthermore, the individualistic approach has been very potent for us in industry and in our economy,” Mullan comments. “Still, that approach does not necessarily add up to good medical care. The PCP is at the center of care, working in a somewhat less spectacular way than some of the specialists, and not being well rewarded for those efforts.”

Income Disparity

In particular, experts have found that for primary care, the overall income or reimbursement patterns under various insurance schemes are about half of what they are for specialists. “Put differently, the specialist is being paid at double the rate per hour as the generalist,” Mullan says. “We need to rectify that, starting with Medicare and followed by other insurance systems. For the immediate future, we need to hold specialists’ salaries constant and pay the generalists more.”

Moreover, the culture of U.S. medical schools needs to change, Mullan adds. “We need primary care to be more central to medical education,” he says. “We need more deans who

are PCPs by training. We need more department chairs who are generalists by background and identity.”

Also, the definition of primary care should be reengineered. “Primary care is a very complicated but very exciting area,” Mullan states. “Most primary care physicians today are running triple time and not doing particularly well in a financial sense. Someone I interviewed called this ‘hamster health care.’ The system has put PCPs in this position. To rectify this problem, a reengineering of primary care is necessary.”

The solo primary care practitioner is, at best, inefficient, the author opines. “He or she cannot manage all that needs to be done, and do it alone. Given all the information management necessary for care, PCPs need ready referrals, nurses, and nurse practitioners to work with; excellent medical information systems; and an electronic medical record. New paradigms, such as group visits and patient support groups, need to be part of the primary care of the future. Between the information revolution, which can really benefit the PCP, and restructuring the practice so that teams are created, primary care practice can be reengineered to be a more successful medical career, a high-tech, high-touch practice, with the PCP at the center.”

In particular, electronic medical records and integrated information systems are of significant value, Mullan says. “Many of us are a long way from an electronic medical record, but this is an area that will develop rapidly,” he says. “Primary care should be at the forefront of this movement because the record should be primary care-friendly, both for the quality of care for the individual patient in that practice setting and for

“Within clinical practice, good prevention, good immunization, good anticipatory care, and good management of chronic diseases keep people alive and decrease the years of productive life lost.”

the swift and accurate referral to other practitioners as necessary.”

Developing a primary care team also will enhance the quality and efficiency of primary care. “All kinds of configurations of teams exist, but certainly PCPs should form groups, especially when almost half of PCPs are female and are looking to balance work and home life,” Mullan says. “In addition, a group practice can become big enough to support a good front office staff, dieticians, and other kinds of providers. Integrated service delivery is where we are headed.”

Historical Factors

In his book, Mullan explains that in 1991, only 14.6% of medical students opted for primary care residencies. From that year forward, managed care began to grow rapidly, and health plans promoted the gatekeeper model. The number of medical students going into primary care rose as a result. Now, with the backlash against managed care, the gatekeeper model has become unpopular.

“When managed care was growing, the industry focused on having a strong primary care center,” Mullan explains. “But the most pernicious forms of the gatekeeping function—in which physicians were paid incentives to limit referrals, hospital utilization, and lab tests—put physicians in a very difficult conflict of interest. Also, some patients exhibited a general disgruntlement with the notion that they were going to be forced to follow a form of pattern referral.”

This interpretation of gatekeeping conflicts with a system in which the PCP is the preferred first stop for any patient, says Mullan. “Given that we have limited health care dollars, we

need to use them sensibly,” he notes. “Therefore, the best system will be managed in some fashion around primary care. Such systems are more successful in terms of containing costs and providing good service. The principle underlying a gatekeeper system is not that patients can’t tell when they need to see a specialist, but that in general most every-day conditions are well handled by a competent generalist. Therefore, referrals should occur only for care that cannot be well handled in that setting.”

One negative result of managed care is that it has given many patients the notion that primary care is managed care, and that is not a good thing, Mullan believes. “We need to reverse that thinking,” he asserts. “There are a variety of ways in which primary care can make its benefits and its presence felt, but it will involve a bit of a fight against public perception.”

Looking Ahead

Adversity, rather than smart collective planning, will shape a more sensible system, Mullan contends. “Our rate of growth in health care expenditures is not sustainable,” he says. “Our current economy is weak, partly due to disproportionate health care spending. We certainly lived through a period of irrational exuberance through the late 1990s when everyone believed the notion that we could have it all. But we are hitting hard economic times. More people are losing their health insurance; more people cannot afford health insurance; companies are laying off workers; and the ranks of the uninsured and the partially insured are growing. These circumstances will ultimately lead to a situation in which there will be

enough political pressure to undertake a major health care reform, a sensible one that will likely build on a primary care base with managed use of hospitals and specialists.”

To get through today’s difficult environment, Mullan encourages primary care physicians to recognize the value of their efforts. “The work they do is enormously important to the well-being of the individuals they care for,” he says. “In addition, primary care is an important symbol, an important tradition, and an important legacy. Many physicians are discouraged. They are retiring early or seeking other careers or telling their children to avoid a career in primary care. While understandable, these tendencies need to be put into perspective. PCPs need to take a stand for the work that they are doing, which is critical to a good and viable system.”

Furthermore, primary care physicians should not hesitate to become politically active, Mullan advises. “Activism, both individually and through their organizations, will help make primary care a central issue in health care reform,” he notes. “Physicians do not necessarily have to participate at a national level. Rather, they can help bring about changes that will upgrade primary care within their medical organizations and local organizations. Primary care physicians need to fight for equity both in perception and in reimbursement. Also, by becoming involved in teaching, PCPs can become role models and pass along the legacy of being a warrior in primary care.”

—Edited by Deborah J. Neveleff, in *North Potomac, Md. More information on physician practice strategies is available on our Web site (see page 16).*

"Soon there will be enough political pressure to undertake a major health care reform, a sensible one that will likely build on a primary care base with managed use of hospitals and specialists."

Internet Use Rising, Report Says

The information physicians find online influences their medical decisions and the way they do business, according to a report by The Boston Consulting Group, consultants and researchers in Boston. The medical knowledge, diagnoses, and prescribing decisions of doctors are changing as e-health becomes widespread and professional use of the Internet increases, says the report. At the same time, e-health is affecting patients' expectations about the care they receive.

"Our survey revealed that doctors are turning to online patient care tools in greater numbers than before," the report says. "More important, they are being influenced in greater numbers by the information they find online."

Physicians and Patients

Published in January, *Vital Signs: E-Health in the United States* was based on a survey last year of about 400 physicians and 10,000 patients. E-health is altering health care by enhancing access to information and services, and by improving the quality, efficiency, accuracy, and the cost-effectiveness of physician practices, the report says.

"As e-health evolves, it is changing the economics, interrelationships, and competitive landscape in the industry, gradually but fundamentally," say the authors. "Health care players must keep pace with these changes by honing their strategies and experimenting with new ones. Rather than being viewed as a separate and distinct

channel, the Internet should be integrated closely with offline capabilities currently used to reach patients."

The use of some online tools for diagnosing, monitoring, and managing health conditions has grown beyond a core group of early adopters, says the report. Last year, two out of five physicians surveyed said they added at least one of three online tools—electronic prescribing, electronic medical records, and remote disease monitoring—to their practices. A fourth major tool is online communication with patients.

Professional Use

But the primary way physicians use the Internet is to gather information. Among physicians surveyed, 90% search the Internet for information about health-related topics. Physicians spend about three hours a week online for professional reasons. More than half of that time is at home, free from the distractions of the office.

Most physicians in the study (91%) reported that the information they find on the Internet increases their knowledge about symptoms, treatment options, and possible diagnoses. About three quarters (73%) reported that the information they find online has an effect on their prescribing decisions.

Two trends are causing physicians to use the Internet more frequently. First, virtually every physician engaged in patient care has access to the Web. The proportion of surveyed doctors who use Web-based technologies rose from 89% in 2001 to 96% in 2002, the report says. Among

physicians online, 99% use Internet-based technologies for professional reasons, and 60% spend at least one fifth of their time online for this purpose.

Second, physicians who use the Internet for professional reasons are getting more involved in it, the report says. The percentage of physicians attending virtual conferences went from 31% in 2001 to 42% last year, and the percentage taking online continuing education courses went from 45% in 2001 to 58% last year, the report says. Also, physicians have now begun using more disease- and specialty-specific Web sites rather than more general health sites, according to the report.

"These two trends make the Internet an increasingly relevant medium for reaching physicians, who are inundated with information," says the report. "Today, doctors are finding that simply hearing messages from health care players, much less choosing which ones to heed, is difficult and growing more so every day."

Electronic Prescribing

The fastest growing of all the patient-care tools is e-prescribing, which allows physicians to use Web-based technologies to check prescriptions automatically against drug formularies and potential interactions. In addition, some physicians use the Internet to send prescriptions to a pharmacy for fulfillment. The survey shows that the proportion of physicians writing prescriptions electronically rose from 11% in 2001 to 16% in 2002, and 21% of responding

As e-health continues to evolve, it is gradually but fundamentally changing the economics, interrelationships, and competitive landscape in health care, the report says.

physicians said they plan to implement e-prescribing by next year.

Many physicians using e-prescribing said it improves their compliance with drug formularies (82%) and the quality of care they deliver (79%). E-prescriptions help physicians reduce the number of queries from pharmacies about prescriptions that are illegible, were accidentally written for inappropriate or nonexistent dosages, threaten to interact with a patient's other medications, or are not covered by a health plan's formulary, the report says.

Electronic Medical Records

EMRs that capture patient medical histories, prescribing information, x-rays, and other data for physicians are the most widely used of all the patient-care tools. Among responding physicians using the Internet, 30% currently use EMRs, up from 22% in 2001. Moreover, 24% said they plan to adopt this tool by the middle of next year.

More than half of surveyed physicians (58%) use EMRs for the efficiencies that paperless systems offer, according to the report. "But efficiency has declined in comparison with physicians' other goals," say the authors. A high percentage of physicians reported they equipped their offices with EMRs primarily to meet mandates from managed care companies and group practices (89%), and to improve the quality of care (87%).

"By ensuring that the most complete patient-health information is instantly accessible, the tools enable physicians to treat patients more comprehensively by integrating care across illnesses and coordinating treatments and medications," says the report. Most physi-

cians who switched to EMRs have converted at least three quarters of their documents to EMRs.

Many physicians consider the cost of EMR systems to be prohibitive, however, and that perception remains a leading impediment to more widespread adoption of these programs. Among physician respondents, 44% of those who do not use EMRs cited cost as a factor. "For that reason, the tools tend to be used by physicians in practices with higher revenues, namely, specialists and larger practices," says the report.

Also hindering the adoption of widespread use of EMRs is uncertainty about regulations for the Health Insurance Portability and Accountability Act. "It remains to be seen how the regulations will affect the collection, sharing, and storage of medical data as well as how compliance with the federal rules will affect the delivery of patient care," says the report.

Disease Monitoring

Remote disease monitoring (RDM) uses technology to capture, report, and analyze patients' health data so that physicians and patients can have an active role in managing chronic conditions between office visits. Typically, physicians use these systems with patients whose symptoms require frequent monitoring, such as those with diabetes. Specifically, among the small percentage (7%) of responding physicians who were using RDM tools, most use them to monitor blood glucose levels. Blood pressure and pulse rate monitoring were the next most common uses.

Generally, patients report self-test-

ing results to their physicians. Among physicians using this tool, 93% said that it enables them to deliver better care, and 96% said that it improves patient satisfaction. "We expect RDM's exemplary performance to generate a buzz among physicians in the near future, which will in turn encourage more of them to adopt the tools," the report says.

Online Communication

The proportion of doctors currently communicating with patients over the Internet held steady at about 25%, from 2001 to 2002. "Growth has stalled because there are more physicians who are afraid of getting bogged down in Web communication than who view themselves as liberated by its enhanced reach and connectivity," the report says. "This fear has kept many from embracing or even experimenting with handling requests for drug refills, addressing queries about minor ailments, and providing other, less critical consultations online.

"To remain competitive, physicians must adjust their strategies as e-health evolves," says the report. "They must understand that e-health poses different kinds of opportunities and challenges to different types of organizations. We believe that as the influence of the online channel increases among doctors and patients, physicians should continue to add the Internet and Web-based technologies to their strategic and operational initiatives."

—Reported and written by Martin Sipkoff, in Gettysburg, Pa. More information on physician practice strategies is available on our Web site (see page 16).

"By ensuring that the most complete patient-health information is instantly accessible, the tools enable physicians to treat patients more comprehensively by integrating care across illnesses and coordinating treatments and medications," says the report.

Cutting-Edge Therapy May Become Standard of Care, Experts Predict

Interventional cardiologists are well positioned to provide intra-arterial therapy for stroke patients, a cutting-edge treatment for patients who present in the early stages of ischemic stroke, according to a recent article. However, the number of endovascular-trained neurosurgeons, neurologists, and neuroradiologists is insufficient to care for all of the stroke patients who may be eligible for this therapy, say the authors.

"Intra-arterial therapy for acute ischemic stroke is a new and promising treatment option," says Elad Levy, MD. But there are not enough neuroradiologists or neurosurgeons available to treat the 800,000 new cases of acute stroke each year, he contends. Levy, a senior fellow of endovascular surgery at Millard Fillmore Hospital in Buffalo, was a lead author of the article published in the November issue of the *Journal of Invasive Cardiology*.

A Demographic Issue

The incidence of stroke increases with age, notes Michael Rinaldi, MD, an interventional cardiologist with the Sanger Clinic in Charlotte, N.C., and co-author of the article. "Given the aging of the population, stroke will become an even more significant burden of disease in the population," he predicts.

"Interventional treatments for stroke have been tested only in the last five years," Rinaldi continues. "Now, more studies are emerging to

show how intravascular treatments in the brain can be helpful in treating ischemic stroke."

Ischemic stroke is usually, but not always, embolic in etiology. In an ischemic stroke, a blood clot or other piece of material becomes lodged in a blood vessel, blocking blood flow and preventing vital nutrients from reaching the brain. In contrast, a hemorrhagic stroke is characterized by the rupturing of a blood vessel; the brain is damaged by massive bleeding or by a vasospasm associated with the irritation of blood in the brain.

Intra-Arterial Therapy

Early intervention for ischemic stroke is critical to improving patient outcomes. "The longer a patient is without blood flow, the larger the territory of brain damage he or she will have," says Levy.

Currently, when a patient has a stroke, physicians try to elevate blood pressure and restore perfusion to the areas at the borderlines of where the stroke occurred, thereby keeping as much tissue alive as possible. "This strategy assumes that the tissue directly in the middle of the stroke is dead," Rinaldi explains. "The newer paradigm in stroke therapy is to try to open the artery and to prevent as much tissue damage as possible from occurring."

In a National Institutes of Health trial, neurologists tried to actively intervene to reduce the morbidity and mortality caused by ischemic

stroke. For the National Institute of Neurological Disorders and Stroke study, the researchers used intravenous recombinant tissue plasminogen activator (t-PA) in patients presenting within three hours of onset of an acute ischemic stroke to save any tissue still alive following the stroke.

"The NINDS study was the first major trial to attempt a new way of treating stroke," Rinaldi says. "Subsequently, some neurointerventional radiologists and neurosurgeons who have intervascular training tried a more aggressive approach: opening arteries and delivering thrombolytics directly into them. Intra-arterial thrombolytic therapy reduced the complications, such as bleeding, associated with t-PA."

Neurointerventional radiologists and neurosurgeons who have endovascular training typically perform interventional procedures for certain conditions, such as brain aneurysms. But only several hundred of these physicians are practicing nationwide, says Rinaldi.

For example, a large academic medical center that performs only 50 to 100 interventions for aneurysms each year might use only one or two neurointerventional radiologists to do those procedures, Rinaldi points out. If intra-arterial therapy turns out to be the best therapy for treating ischemic stroke when it presents at an early stage, there will not be enough neurointerventional radiologists and neurosurgeons who have

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—Michael Rinaldi, MD, Sanger Clinic

Interventional cardiologists interested in becoming involved in this care would have to receive intensive training from neurointerventional radiologists and neurosurgeons who have endovascular training.

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endovascular training to cover all stroke cases, he adds.

A Logical Choice

Interventional cardiologists are a logical choice to provide care for these patients, the authors note. The techniques used in acute stroke intervention, such as clot removal and angioplasty with stent placement, are similar to the techniques that interventional cardiologists are currently using.

“Interventional cardiologists already maintain significant intravascular skill, which they employ during cardiac catheterization,” Levy says. “Furthermore, they are very familiar with the techniques used for stent deployment, balloon angioplasty, and other salvage maneuvers to open up vessels. They understand thrombolytic and anticoagulant therapies. Although most of them lack an intimate understanding of the neurovascular anatomy, they can be trained to do a neurologic exam and to apply their intravascular skill to brain anatomy.”

Also, the equipment necessary for the interventional treatment of ischemic stroke is similar to the equipment that interventional cardiologists use in catheterization laboratories. Typically, these labs are equipped to provide emergent angioplasty for acute myocardial infarction. Interventional cardiologists could learn relatively rapidly how to use equipment to treat ischemic stroke, Rinaldi believes.

Finally, the number of interventional cardiologists is larger than the combined total of neurointerventional radiologists and neurosurgeons with intravascular therapy training. “The mass training of neurointerventional specialists to provide invasive

acute stroke interventions is not feasible,” says Levy. “But interventional cardiologists already have an infrastructure for providing emergent endovascular care.”

Training Required

While interventional cardiologists may be a logical choice to provide stroke care, they would first need to receive significant training. As Rinaldi points out, interventional treatment for ischemic stroke is a complex, evolving field. “Acute intervention for stroke is not yet the standard of care,” says Rinaldi. “Most interventional cardiologists do not understand the details of the disease such that they could make the rapid decisions necessary to optimize care.”

Becoming involved in this care would require receiving intensive training from neurointerventional radiologists and neurosurgeons who have endovascular training. “Acute stroke intervention cannot be learned from a weekend course,” Rinaldi says. “To provide this care, interventional cardiologists would have to commit time and effort to learning how to do it properly because the results of doing it improperly would be devastating.”

The amount of training time would likely vary, but a significant amount of time spent with an interventional neuroradiologist or an interventional neurosurgeon would be necessary before the interventional cardiologist could start to understand the neuroanatomy and the techniques used to access the cerebral vessels, Levy notes.

For example, one key difference between the heart and the brain is that the cerebral vessels are less

robust than those of the coronary circulation. “Coronary arteries have very thick walls, whereas the intracranial vessels have much thinner walls,” Levy explains. “Because of that we tend to use softer wires and some different techniques. But the basics are the same.”

Cardiologists would also have to learn how anatomy relates to neurologic function, Levy continues. “So, for example, when they saw patients who could not move their right arm and right half of their face, they would know immediately that the left middle cerebral artery territory was being affected and could target that area directly.”

How stroke presents is another area to be learned. “Cardiologists would learn how to read a CAT scan or an MRI so that they could determine the best course of action,” says Rinaldi. “They would learn how to determine when a scan indicates a very high risk of bleeding if thrombolytics are used and, in general, which cases would be favorable for intervention.”

After such training, cardiologists could be part of a multidisciplinary approach to stroke care, according to Rinaldi. “Interventional cardiologists should not offer this care in competition with an established program for neurosurgeons and neurointerventional radiologists,” he says. “But they can supplement the care offered by those specialists.”

Levy agrees, saying, “The optimal interventional cardiologist treatment of acute stroke would occur in a setting in which neurologists would help assess the area of the brain that is affected.”

But having a neurologist present is not always possible. “The most important thing for stroke patients is

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bidding for a limited pool of available candidates, and hospitals, particularly nonprofit facilities, usually lose out of necessity to avoid conflicts with federal regulators. "The richer incentive packages are coming from group prac-

than men, according to well-publicized, peer-reviewed studies. Moreover, the schools produced only 1% more graduates from 1992 to 2001, while the U.S. population grew by 13% during that period.

U.S. residency or fellowship programs. Though other parts of the exam may be taken in foreign countries, the clinical skills portion requires IMGs to pay a \$1,200 fee and travel to Philadelphia or Atlanta

Almost 90% of U.S. hospitals are recruiting physicians, according to a 2002 survey by Merritt Hawkins & Associates.

tices," says Stewart.

One anecdotal report among physician recruiters involves a neurosurgeon in the Southeast who, with only five years of experience, obtained a guaranteed starting salary of \$800,000, nearly double the top starting salary for neurosurgeons nationally five years ago.

"A radiologist in the Midwest received an irresistible recruitment benefit of a \$3,000 monthly stipend, paid continuing medical education, and paid vacation time for 19 months during training in exchange for an employment commitment to work for a large practice," says Stewart. "A West Virginia group hired a gastroenterology fellow by offering him a yearly salary of \$350,000 plus a \$50,000 signing bonus."

Demographic Factors

Such offers are surprising considering the state of the economy. "The jump in physician salaries is somewhat unexpected with the recession, cost containment by Medicare and Medicaid, and private insurance cut-backs," observes Edward Salsberg, director of the Center for Health Work force Studies at the State University of New York at Albany.

In addition to disgruntled doctors, academic and demographic factors are also affecting the deficits of physicians. Currently, nearly 50% of medical school graduating classes are women, compared with rates of a decade ago when only 36% were women. Women work fewer hours

The shortage of residency candidates is exemplified by a 2002 survey conducted by the Society of Thoracic Surgeons (STS) in Chicago. Of 144 residency positions available for heart surgeons, 21 were unfilled early this year. Previously, there were several applicants for each slot. The number of applicants for general surgery residency programs also has slipped, by about 30% over the last nine years, according to studies published in the March 2002 issue of the *Archives of Surgery*.

Residency candidates are disinterested in general surgery because it requires years of training and long work hours that cut into personal time, research shows. Trainees are reluctant to join heart surgery programs because of reductions in reimbursement from Medicare, the cost of nurses and physician assistants, the rising cost of liability insurance, the need to repay steep tuition loans, and 60- to 80-hour workweeks, according to STS analyses. The society estimates that 50% of its heart surgeons will retire by 2010, while the numbers of those entering training are too low to replace them.

Filling the Gaps

International medical school graduates (IMGs) often fill gaps in physician supply, especially in rural communities. But that pipeline has dried up since the 1998 addition of a mandatory face-to-face clinical skills assessment portion to an exam required for certification to enter

to demonstrate English proficiency.

Before the clinical skills portion was added, 10,297 foreign graduates were certified in 1997 compared with an estimated 5,429 in 2002. "Changes in the number and characteristics of those seeking certification directly affect the graduate medical education population and the future physician work force in the United States," wrote authors of a report on the problem that appeared in the Sept. 4 issue of JAMA. Foreign medical school graduates make up one quarter of U.S. physicians.

Military doctors who complete obligations also helped to fill vacancies. But after the terrorist attacks of Sept. 11, 2001, their tours of duty were lengthened, says Kurt Mosley, MHA's vice president, business development. "A lot of doctors who were coming to us from the military had their commitment or separation dates extended after 9-11," he says.

Besides the lack of trainees and military candidates, the nation's population is aging, potentially requiring more medical care. Recruiters, such as MHA's Merritt, say the conditions involving physician supply and demand is akin to the perfect storm. In the past, shortages often were confined to rural areas. "Now hospitals in cities from Boston to Boise are looking for physicians," he comments. In 1998, the majority of MHA searches were for small communities. That trend reversed in 2002 when the largest number of searches involved organizations in communities of more than 100,000 residents.

Most striking is a recent survey by the San Diego County Medical Society, reported in the Feb. 3 issue of *AM News*. Recruiters say San Diego is one of the most desirable areas in the country because of its mild climate, and it has been largely immune to shortages. Yet, that city will soon experience a deficit of doctors as well. According to the survey, 35% of San Diego area doctors plan to stop practicing in the next three to five years. One third of those who plan to stay are cutting patient care hours. Among physicians who responded to the survey, 71% said recruiting new doctors was difficult; 26% of San Diego respondents aged 36 to 45 and 29% of those 45 to 55 said they would relocate, retire, or change professions in the next five years.

Last year, Richard Cooper, MD, and a team of researchers at the Health Policy Institute at the Medical College of Wisconsin in Milwaukee, predicted a dramatic shortage of 200,000 physicians by 2020. Officials at state medical associations and specialty societies have expressed similar alarm. "There's more water going out of the bathtub, than going in," comments MHA's Mosley.

A Glut or a Shortage?

Still, the AMA officials hold that there is no physician shortage. "From a national perspective, a shortage does not appear to exist," says an AMA spokesperson. "Between 1990 and 2001, the supply of physicians in the United States grew 35.9%, more than twice the growth rate for the U.S. population. During those years, only four specialties saw a drop in physician supply: general practice, general surgery, public health, and aerospace medicine."

And, as late as January 1996, the National Academy of Sciences was urging the United States to take immediate steps to cut residency funding and freeze medical school class sizes in fear of a glut. NAS has not produced a report on the subject since. However, one academy researcher, Ann Greiner, says predicting physician supply and demand is difficult. "There are too many factors involved, such as practice climate, the supply of foreign medical school graduates, federal policies, and the use of physician extenders," she notes.

Some analysts claim the United States has an insatiable desire for medical talent. The more abundance of physicians, the more citizens find a need for them. If the need for physicians can be filled, then experts raise the issue of distribution, and the question of true shortage versus maldistribution has always been controversial. "It's true more doctors live in desirable metropolitan areas but we also have an increased need for services all over," says Westfall. Recruiters, who used to accept physician shortages as being cyclical, are not so quick to call the current climate a passing phase.

CompHealth's Stewart says, "The specialties are growing astronomically and unpredictably."

And, adds Westfall, "Everyone wants to know if this is temporary. I don't see it going away in the short term, in the next three to five years. Training programs have not expanded their capacity to match the demand for specialists. Even when they do, it will take years to train a new crop of doctors."

Moreover, an exodus out of practice could continue. One in six physicians is somewhat or very

unsatisfied with his or her career, reported researchers of a study released in January by the Harvard Medical School and the Center for Studying Health System Change in Washington, D.C.

For the moment, recruiters scramble to fill jobs that go wanting, some 18 months and longer. "I wish the AMA would tell us where the oversupply is," Stewart says. Search specialists at Cejka & Co. are making a lot more cold calls, even to retired doctors. One Southwest surgeon contacted by the firm had been retired for three years. He missed medicine but didn't know how to get back in. The surgeon wound up accepting a \$200,000 position with a two-man group that ideally wanted a resident.

In 1998, MHA's top request was for family practitioners and internists. By 2002, it became radiology, cardiology, orthopedic surgery, and internal medicine. "The situation is pretty dire in states where malpractice is a serious issue, such as New Jersey, Nevada, West Virginia, and Pennsylvania," says Mosley. "In the last six months in West Virginia, one hospital paid an orthopedic surgeon a \$50,000 signing bonus and \$50,000 for loan forgiveness," he relates. "Five or ten years ago, a top signing bonus would have been \$15,000."

Groups or hospitals offering doctors below-market rates will not fill their positions, says Michael Lindsey, senior vice president, permanent placement, Medical Doctor Associates, in Norcross, Ga. "Residents get 40 calls daily from recruiters," he says. "They can pick and choose their situation."

—Reported and written by Maureen Glabman, in Miami. More information on physician practice strategies is available on our Web site (see page 16).

"I wish the AMA would tell us where the oversupply is," says Larry Stewart of CompHealth.

In many areas, there are no interventional neurosurgeons or interventional radiologists. By learning to provide intra-arterial therapy, interventional cardiologists could provide a tremendous service to their community, says Elad Levy, MD, of Millard Fillmore Hospital.

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to have treatment available immediately," Levy explains. "A patient who is transported to a location that is hours away just to have a neurosurgeon or an interventional neuroradiologist provide treatment may suffer additional damage to brain tissue in the interim. In this case, it would be preferable to have a properly trained interventional cardiologist provide treatment."

Interventional cardiologists might provide this care, for example, in areas with small or medium-sized hospitals that are far from academic medical centers.

Future Reimbursement

Interventional cardiologists might be motivated to develop an ability to provide this therapy for several reasons, Levy believes. "First, understanding acute stroke intervention will help them address complications that occur in their cardiology patients," he says. "Strokes do occur during the interventional procedures that cardiologists perform, as plaque from the aorta may go up the carotid artery. If cardiologists are treating carotid arteries, they can get embolic debris, potentially causing a stroke. Having the understanding and the ability to treat these complications may result in better outcomes for the patient than could occur if the patient had to be sent several hours away to a neurosurgeon or neuroradiologist."

What's more, interventional cardiologists may be the only source of this service in their communities, since there are no interventional neurosurgeons or interventional radiologists in many areas, Levy notes.

Recognizing this need, L. Nelson Hopkins, MD, chairman of neurosurgery, and Lee R. Guterman, MD, director of endovascular neurosurgery research and development, both at Millard Fillmore, started an acute stroke intervention fellowship at the hospital.

"We welcome physicians who can be trained and then bring acute stroke therapy back to their communities," Levy says.

One problem with acute intervention for ischemic stroke is that it is not a reimbursable procedure, Rinaldi cautions. "The physicians who offer this treatment do so because they think it is a benefit to their patients and because they are interested in furthering the field by trying pioneering new technologies," he says.

However, if studies continue to demonstrate that acute intervention for stroke improves patient outcomes, it will likely become a reimbursable procedure. "Stroke costs the U.S. health care system billions of dollars each year," Levy says. "Taking care of acute stroke patients is a tremendous financial burden, given the cost of long-term rehabilitation and nursing care. If acute stroke can be prevented or at least ameliorated, the total costs of stroke care will be reduced, which is one reason the procedure is likely to become reimbursable."

Rinaldi points out that reimbursement approval for cutting-edge technologies typically occurs once these technologies are proven to be the standard of care. "It is unlikely that just using intravenous thrombolytics will constitute opti-

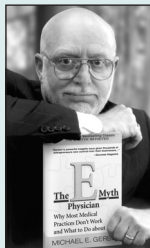
mal care for ischemic stroke," Rinaldi says. "Rather, a rapid mechanical way of opening arteries is going to be the future of stroke care. Advances in this field will be such that this treatment option will eventually become the standard of care, just as primary angioplasty for acute myocardial infarction has become the standard of care and is clearly superior to thrombolytic therapy alone. At that point, acute intervention for stroke will be accepted in general practice, and there will be an explosion in the number of physicians doing the procedure."

Currently, acute therapy for stroke is limited to large academic hospitals, says Rinaldi.

For now, interventional cardiologists who are interested in this field should consider working with experts to get more training, Rinaldi says. "Many programs offer intra-arterial administration of thrombolytics for acute stroke because the physicians in these programs think it is the right thing to do," he says. "Interventional cardiologists may find that the neurologists in these programs need help providing coverage and are interested in having interventional cardiologists participate."

—Reported and written by Deborah J. Neveleff, in North Potomac, Md. Interventional cardiologists interested in learning more about treating patients with acute stroke and developing such services may call L. Nelson Hopkins, MD, or Lee R. Guterman, MD, at Millard Fillmore Hospital, in Buffalo, N.Y., at 716/887-5200. More information on physician practice strategies is available on our Web site (see page 16).

E-mail, Web Help Physicians Improve Communication With Patients



Michael E. Gerber is the founder and CEO of E-Myth Worldwide, a business consultancy in Santa Rosa, Calif., and the author of *The E-Myth Physician: Why Most Medical Practices*

Don't Work and What to Do About It (New York: HarperBusiness, 2003). He has worked with many small business owners, including many medical professionals, to help them improve the productivity and success of their businesses. Gerber discussed his ideas for physicians with Richard L. Reece, MD, editor in chief.

Q: Let's begin by clarifying that the "e" in the title of your new book, *The E-Myth Physician*, stands for entrepreneurial, not electronic.

A: That is correct. I am referring to the entrepreneurial myth, which is essentially the myth that most people who start small businesses are entrepreneurs. In fact, an individual may understand the technical work of a business—such as a doctor understanding how to practice medicine—but may not automatically be able to run that business successfully.

Most medical practices today are not necessarily going out of business, but many are failing to fulfill the potential that the physicians had envisioned as students in medical

school. In fact, most doctors who own their own practices don't really own a business. Instead, they have created a job at which they are working constantly, hoping to be able to take some time off. But, they don't know how their practice would run without them.

Q: In your book, you identify two kinds of doctors: those who own their practices and those who work for HMOs or insurance companies. Is the book directed at the first group?

A: Yes. My book is directed toward physicians who are small business owners. Most of these physicians are either in solo practice or in small medical groups. These physicians are like members of every profession: They believe their profession is unique; they believe the circumstances their profession faces are unique; and they believe their problems are unique.

Doctors do not tend to think of themselves as business owners. They think of themselves as medical professionals, which is obviously what they are. The problem they encounter in thinking of themselves as medical professionals and not as small business owners is that they suffer from many frustrations related to their lack of business knowledge. They don't want to run a business; they want to treat people. But, they are, after all, in the *business* of treating people.

The purpose of *The E-Myth Physician* is to help doctors under-

stand that the main obstacle to their having a successful medical practice is that they were never taught the business skills necessary to run their practices well. Medical schools teach doctors to become great medical practitioners but offer little or no guidance on the multiple nonmedical proficiencies required to build a thriving medical enterprise.

Compounding the problem is that many physicians have made a fatal assumption; they think: "If I know how to provide medical care, I can practice medicine and live a successful life forever after." But there are many critical roles that must be learned in order to have a successful medical practice. Physicians must be business managers, not just clinical technicians.

Q: Do most doctors practice medicine simply as technicians?

A: Many doctors say, "I'm not going to work in the hospital anymore; I'm not going to work in this group anymore; I'm going to go out and start my own practice. I will do things my way." But they may not understand how a practice must become an emerging business in order to flourish.

Basically, a medical practice can be viewed in three ways. First it is a practice. Second, it must become a business. Third, it has the potential to become an enterprise. For the practice to become an enterprise, the physician must have a business

(Continued on page 14)

"There are many critical roles that physicians must learn in order to have a successful medical practice. Physicians must be business managers, not just clinical technicians."

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model that will allow it to flourish.

As more medical practitioners become entrepreneurial, the health care industry will become more competitive. This trend will lead to improvements not only in how physicians do business, but also in the medical services they provide.

In fact, as the world of medicine changes, it will become more difficult for doctors to continue to run their businesses the way they have been and not lose market share.

Q: So, doctors need to change their business model and their way of thinking?

A: Yes. Until doctors change the way they think, they will never change what they do. Successful business owners must have clarity of vision. Most medical practices have no vision, and without vision, the overwhelming experience of everyone in that medical practice is what I call the “tyranny of routine”: “Doing it, doing it, doing it.”

Q: Can you give an example of a physician who developed a vision and implemented it?

A: In my book, I describe a physician who thought about what he wanted his practice to be, and he stated his vision in his mission statement, which was this: “We will be on time every time exactly as promised or we will pay for your visit.” He went about fulfilling that mission and that vision, and he enlisted the help of his staff to be on time every time.

This physician’s vision is stunningly original. Given the reality of a medical practice, most patients know they have to wait to see the doctor. In my book, I talk about the phe-

Asking Key Questions Helps to Improve Results

Great managers ask key questions that help to define the results they intend to achieve with the support of their staff, says author Michael E. Gerber of E-Myth Worldwide, a consulting firm in Santa Rosa, Calif. The questions are:

- What is the result we intend to produce?
- Are we looking to produce that result every time?
- How can we produce even better results?
- Do we lack systems in certain areas of our business?
- If we lack certain systems, what would those systems look like if we were to create them?
- If we have a system, why aren’t we using it?

—DJN

nomenon of the waiting room experience, which is about as dehumanizing as any experience can be. Patients make an appointment to see the doctor, knowing that it isn’t a real appointment because, in many cases, the doctor doesn’t see the patients until the doctor is ready. Essentially, this says to the doctor’s patients, “You don’t matter. I do.”

If I were an entrepreneur who wanted to create medical practices, I would examine solo medical practices and look for key opportunities to differentiate my practice from everyone else’s practice. The first promise I would make is to be on time. In essence, physicians should look for patient-friendly ways to practice the business of medicine.

Q: Is boutique medicine an example of this type of differentiation?

A: Absolutely. Physicians who are offering this type of care are dropping out completely of typi-

cal organizations. They are promising their patients that they will be available 24 hours a day and that they will navigate their patients through the complicated maze of health care.

Although boutique medicine is an example of entrepreneurial differentiation, it is not necessarily an efficient or effective model. Although the physicians may promise to be available 24 hours a day, they still have to figure out how to deliver the services to their patients. Boutique medicine may be better than the typical dehumanizing health care experience, but it’s still not good enough.

Q: To be successful in any entrepreneurial venture, entrepreneurs must first develop a business plan. And yet, doctors often don’t do so, do they?

A: No. They hire a consultant to do that for them. Physicians will abdicate—rather than delegate—accountability for developing such a plan.

“As more medical practitioners become entrepreneurial, the health care industry will become more competitive. This trend will lead to improvements not only in how physicians do business, but also in the medical services they provide.”

How to Improve Physician-Patient Communication

One step physicians can take to help eliminate patient dissatisfaction is to always listen to—and never interrupt—their patients, says Michael E. Gerber of E-Myth Worldwide, a consulting firm in Santa Rosa, Calif. He also suggests that physicians ask themselves the following questions in order to improve their communication with patients:

- How do I greet my patients?
- Do I know my patients' names?
- Do I know what the experiences of my patients are?
- How do I interact with my patients?
- Can I improve this interaction?
- Have I organized my practice around health awareness and development?

These types of questions can help physicians focus on how they interact with their patients, which can improve patient satisfaction and help eliminate patient dissatisfaction, Gerber says.

—DJN

The problem with professionals is that they believe in professionals, so they go out and hire professionals to help them do something that is distasteful to them or uncomfortable for them. This way, they never learn anything about what they are hiring the professionals to do. They never, in fact, believe that it is truly important for them to understand what strategy is, what tactics are, what systems are, how marketing works, how management works, how increased productivity works, how people work, and how people can be inspired so that they are engaged in a productive way.

Basically, strategic planning in a medical practice has three core components that comprise, what I call “the planning triangle.” These are the business plan, the practice plan, and the completion plan. The business plan determines who you are, the practice plan determines what you do, and the completion plan determines how you do it.

Q: What advice can you give physicians regarding how to manage their staff?

A: As businesspeople, physicians need to both train and inspire their staff. To accomplish this goal, physicians need to build systems that not only support their staff, but also empower the staff to develop in such a way that they can produce significantly better results than their own personal skills and experience would enable them to do on their own.

Great personnel management involves a great management system. Management isn't about controlling people. It's about managing a system through which results are achieved. Systems allow the physician's staff to know what results they are accountable for achieving; they don't have to guess.

Q: How should physicians, as businesspeople, handle patient dissatisfaction?

A: The best way to deal with patient dissatisfaction is to avoid it in the first place—if at all possible. The key to doing so is simple: Just keep promises that have been made. What's more, physicians should try to make certain

every step of the way that their patients know that they have kept their promises.

Q: Your book also offers a section on the fundamental processes that occur in a medical practice. How can these processes be improved?

A: These processes, such as on-time scheduling, are fundamental, but they are often forgotten. Or, they become too mechanical. Physicians need to focus on finding extraordinary ways to do all of these things. For example, when was the last time patients walked into their doctor's office and saw a vase of fresh flowers? Physicians are not focused on the effect of such heartening things that help enliven the experience for patients.

Q: How can physicians take charge of their businesses?

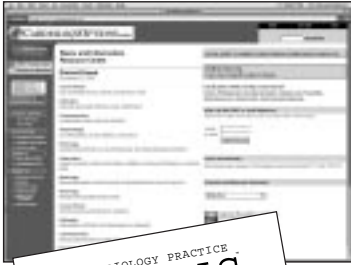
A: There are many things that they can do; here are a few. Independent physicians must recognize that they aren't simply working for their own personal income. They are also working for the equity and value of their business as a whole. Physicians must simply become more entrepreneurial about their practices.

Instead of keeping a distance between themselves and the work of the office manager, doctors should continually keep the manager well informed of their vision and ideas so that the manager can innovate, quantify, orchestrate, and monitor all systems through which the practice produces results.

Most important, physicians must develop a plan. I can't stress this enough. Without a plan, without a charted route, doctors won't be able to implement their vision with any clarity. The vision defines the plan, and the plan defines the steps involved in achieving that goal.

—Edited by Deborah J. Neveleff, in *North Potomac, Md.* Gerber can be contacted at www.e-myth.com/physician. More information on physician practice strategies is available on our Web site (see page 16).

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