Federal Support of Medical Education: Framing the Issues for the Systems Reform Debate

Friday, May 6, 1994
8:30 to 9:00 am - Continental Breakfast
9:00 to 11:30 am - Discussion
B-369 Rayburn House Office Building
Capitol Hill

A briefing featuring

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President and Chief Executive Officer
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Committee on Energy and Commerce
House of Representatives

By special invitation. Attendance limited. To accept, please call Dagny Canard at 202/872-1392 as soon as possible.
Federal Support of Medical Education: Framing the Issues for the Systems Reform Debate

Medical education support in this country is complex, complicated, and convoluted. As the health reform debate focuses on federal and state roles in preparing the health workforce, understanding current medical education incentives and predicting the outcomes of various changes are major challenges. The acronyms alone are enough to befuddle would-be analysts. For instance, who really wants to tackle a topic in which GME traditionally has been divided into DME and IME, the AAMC prefers "AMC" while the AAHC likes "AHC," and some confuse PropAC and PPRC and think the COGME acronym is some sort of PPS adjustment?1

Crucial to the debate is the fact that the public sector has accepted responsibility for funding a portion of medical education. With the original aim of improving access to care by increasing the number of practitioners, the federal government began financing the medical education establishment in the 1960s. Its support is primarily through Medicare but is reflected as well in Department of Defense training, Department of Veterans' Affairs initiatives, National Institutes of Health (NIH) grants, and health professions categorical programs. Also critical to the debate is the fact that the federal government has subsidized teaching institutions for certain ill-defined functions outside the realm of education, such as care of severely ill patients and services for low-income and indigent people. States also have carved out medical education roles, through appropriations to state medical schools (the majority of which are state-owned) and teaching hospitals, as well as through Medicaid.

Educational support from the federal and state governments and a limited number of private insurers

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1Translation: For instance, who really wants to tackle a topic in which graduate medical education traditionally has been divided into direct medical education and indirect medical education, the Association of American Medical Colleges prefers "academic medical center" while the Association of Academic Health Centers likes "academic health center," and some confuse the Prospective Payment Assessment Commission with the Physician Payment Review Commission and think the Council on Graduate Medical Education acronym is some sort of prospective payment system adjustment?

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investigators in the schools who were encouraged and rewarded for specialization, which in turn generated more specialization. At the same time, employer-based private insurance spread, abetted by publicly insured care for soldiers during the war and for veterans after it. As insurance grew, it fostered procedure-oriented inpatient services through its benefit structure and contributed to educational costs through the hospital-charge system.

Initiatives in the 1960s added yeast to the mix. The Health Professions Education Assistance Act of 1963 sought to improve access to health services by boosting the number of practitioners. It authorized matching grants for construction of teaching facilities for medical, osteopathic, dental, public health, nursing, and other schools and created a loan program for medical, osteopathic, and dental students. (Later, it targeted certain programs: lack of minority participation and geographic and specialty maldistribution. Starting in the early 1970s, federal capitation grants also contributed, by expanding medical, osteopathic, dental, and other school enrollments. Moreover, the Veterans Administration [VA]—now the Department of Veterans' Affairs—strengthened its system, in part by allying regional hospitals with medical schools. Eventually, the VA helped create new state medical schools and expanded its support of medical education faculty and residents. States played a part by expanding their own medical schools.)

Enactment of the Medicare and Medicaid programs in 1965 brought policy initiatives that evolved into major challenges for systems reformers today. In addition to paying teaching physicians for services they provide to patients, Medicare recognized medical training costs—"direct medical education" (DME) expenses—in hospitals. These costs include the salaries of teachers, residents, supervisors, and administrators and education-related expenses such as classrooms. Originally reimbursed under the Medicare program on a reasonable-cost basis, this "overhead" was relegated by 1985 legislation to a formula for eligible full-time-equivalent (FTE) residents times inpatient days attributable to Medicare hospital days. "In 1991, Medicare paid approximately $1.5 billion in DME payments," according to the Physician Payment Review Commission's (PPRC's) 1993 Annual Report to Congress. Total expenditures for DME costs, however, were nearly $5.5 billion, with the remainder paid directly by some state Medicaid programs and indirectly by private insurers through higher payments for patient services.

Medicare also recognized intangible medical training costs that are not specified but are seemingly associated with greater severity of illness, treatment of low-income and indigent patients, utilization of advanced technology, higher amount of testing, and conduct of clinical research. Called "indirect medical education" (IME) costs or "the indirect factor," this portion of Medicare funding was institutionalized by the Medicare prospective payment system (PPS) enacted in 1983. It was set by Congress to be an 11.59 percent add-on to each diagnosis-related-group (DRG) payment and has gradually declined to a 7.7 percent increase in each DRG, based on 10 interns and residents per 100 beds. In 1991, Medicare paid $3.3 billion for IME, according to PPRC's 1993 report.

DME and IME are often said in the same breath as twin components of graduate medical education (GME) costs. "It is important to distinguish between the goals of the two," Donald Young, M.D., executive director of the Prospective Payment Assessment Commission, stresses. "Although both are payments to hospitals, GME [ProPAC's term for traditional DME] is based on Medicare's share of costs associated with running residency training programs, while IME is estimated payment for the higher patient care costs that teaching hospitals experience."

Because DME and IME are identifiable pots of federal money and because the money in those pots goes to teaching hospitals, they are targets for reform, particularly by those who want to shift the educational system to production of primary-care physicians. "Although nominally neutral on the distribution of residents, Medicare's GME payments in reality strongly encourage non-primary-care-physician specialization," George Washington University (GWU) Professor Peter P. Budetti, M.D., J.D., contended at a Senate Finance Committee hearing March 8. "They do so in part because they focus nearly exclusively on hospital-based training, cutting off the development of training sites needed for primary care experiences. In a similar vein, he indicated that indirect payments "to only seven big teaching hospitals, which average about $9 million each, equal the entire appropriation for primary care training programs."

AHCs have responded to incentives that date back almost half a century. Although patient revenues are now the biggest component of medical education funds, those incentives were in large part federally driven, part of a mandate to open access to services by increasing the number of practitioners, particularly physicians. Although the philosophical and budget debate over the
past two decades has focused mainly on DME and IME dollars to teaching hospitals, it is widening to include other concerns, such as why the federal government should help fund the education of physicians, what the goals of its medical education funding should be, what training settings (such as inpatient versus ambulatory and urban versus rural) are most appropriate, and what entity should receive the funds in order best to achieve workforce goals. Whether putting bull's-eyes on DME and IME has restricted or broadened the debate is a matter of conjecture, but there is no question that national policy on health care workforce issues—rather than funding for teaching hospitals—is the center of the debate.

THE MEDICAL EDUCATION ENTERPRISE

A total of 124 medical schools in the United States are accredited by the Liaison Committee on Medical Education. Most of the schools are parts of AHCs, which usually include a medical school and one or more health professions schools (allied health, nursing, dentistry, pharmacy, public health, and veterinary medicine), and at least one teaching hospital. There are 388 hospitals—not all AHC-based—in the Council of Teaching Hospitals of the Association of American Medical Colleges (AAMC). Of these, 287 are short-term, acute-care, nonfederal hospitals that have 20 percent of the nation's hospital beds and provide 50 percent of its uncompensated care; 72 are operated by the VA; approximately 60 are university-owned; and the rest are in miscellaneous categories. In addition, nearly 1,300 U.S. hospitals are affiliated with medical schools and take part in one or more residency programs.

According to ProPAC, major teaching hospitals comprise just 4.2 percent of hospitals in the United States but have 67 percent of the residents, account for 14 percent of total discharges and 9.6 percent of Medicare discharges, are responsible for 32 percent of Medicare disproportionate-share-hospital (DSH) payments, and receive 61.6 percent of IME payments. With 80.4 percent of hospitals non-teaching, "other" teaching hospitals make up 15.4 percent of hospitals and account for 33 percent of the residents, 32.5 percent of total discharges and 31.6 percent of Medicare discharges, 35.5 percent of DSH payments, and 38.4 percent of IME payments.

"The total number of active physicians has more than doubled since 1950, and that number now stands at approximately 600,000," Richard A. Cooper, M.D., dean of the Medical College of Wisconsin and director of its Health Policy Institute, told an American Medical Association (AMA) forum in July 1993. He predicted that the total size of the physician workforce would reach 900,000 within 30 years. Most of the growth has been in specialty medicine. Only 30 percent of U.S. physicians are generalists, defined as family physicians, general internists, and general pediatricians. (See NHPF Issue Brief No. 623, June 21, 1993, "Proposals to Reform the Physician Workforce: Tipping the Scale toward Primary Care.")

"Currently, 7,189 allopathic residency programs provide training to more than 86,000 residents. In addition, approximately 3,500 residents are training in programs in osteopathic medicine, oral and maxillofacial surgery, and podiatry," according to PPRC's 1993 report. Since 1981, "the pool of allopathic residents has increased 24 percent." The number of first-year residents is greater than the number of U.S. graduates. "In 1991, there were 4,700 more first-year residents than U.S. graduates. These slots were filled by graduates of foreign medical schools, commonly referred to as international medical graduates."

Residency decisions result from an intricate governing process that involves private accreditation organizations, teaching facility administrators, residency training program directors, and government entities. The Accreditation Council for Graduate Medical Education (ACGME) determines general accreditation standards. It is sponsored by the American Board of Medical Specialties, American Hospital Association (AHA), AMA, AAMC, and the Council of Medical Specialty Societies; it also includes a nonvoting representative of the federal government. Two dozen specialty-specific residency review committees (RRCs)—each including representatives of the AMA, appropriate specialty board, and perhaps national specialty societies—govern educational standards, such as content, duration of programming, teaching setting, and necessary volume of service. Residencies for osteopathic medicine, oral and maxillofacial surgery, and podiatry have similar governing structures. There is no provision for coordination of the RRCs, say to match the number and mix of residency positions to workforce policy goals; among other reasons, antitrust restrictions have precluded setting quotas. (See PPRC's 1993 report to Congress.)

A medical student usually spends a minimum of seven and an osteopathic student five post-baccalaureate years in basic science, clinical clerkship, and residency. The medical student and osteopathic student
spend four years in medical or osteopathic school. The medical student then has a residency of three to seven years; the osteopathic student has a one-year required internship plus two years of residency. For medical students, three-year residencies include the primary-care specialties of family practice, general internal medicine, and pediatrics, as well as pathology and emergency medicine. Residencies for such specialties as physical and nuclear medicine, obstetrics, psychiatry, dermatology, neurology, ophthalmology, otolaryngology, anesthesiology, radiology, pediatrics and internal medicine subspecialties, neurosurgery, orthopedic surgery, urology, and colon, plastic, and thoracic surgery range from three to seven years. A medical student pays tuition, while a resident receives an annual stipend.

Full-time medical school faculty, who numbered 81,492 in the 1992-93 academic year, have multiple functions. Often simultaneously, they teach undergraduate and graduate medical students and residents and other health professions students, provide direct patient care services, and conduct research. Because funds from education, patient service, and research may be commingled, it is sometimes difficult to trace the funding streams for teaching physicians who are part of AHC faculty practice plans and are involved as well in research grants.

MEDICAL EDUCATION DOLLAR FLOWS

Growth in overall revenues of U.S. medical schools—from $696 million in 1963 to $111 billion in 1985 to $23 billion in 1992—is related more to an increase in patient care and research than to teaching activity. In fact, during the past 30 years, the proportion of medical school revenues provided by services to patients has risen significantly. As it has increased, the share contributed by the federal government has dropped.

In the 1963-64 academic year, only 3 percent (of the $696 million) in medical school revenues came from patient care, while more than 54 percent represented federal support (36 percent for research and 19 percent for other kinds), according to Robert H. Ebert, M.D., and Eli Ginzberg, Ph.D., writing in a special 1988 supplement to Health Affairs. Of the remainder, 14 percent came from state governments, which have continued to figure prominently in medical education, whether in the construction and expansion of facilities or in the encouragement of higher enrollments; 5 percent from tuition fees; and 25 percent from other sources. By 1991-92, the figures had changed dramatically. The percentage of support from medical services had risen to 47 percent (of $23 billion in revenues) and the percentage from the federal government had dropped to 22 percent. Support from state and local governments stood at 12 percent, tuition accounted for 4 percent, and other sources contributed 15 percent. (See the September 1, 1993, "medical education issue" of the Journal of the American Medical Association.)

Once Medicare (and to some extent, Medicaid) had been enacted—opening access, paying reasonable costs, subsidizing GME, and fueling provision of largely hospital-based, specialty services—and once private insurance had gained a significant amount of the middle-class market, the incentives were in place for the development of the medical enterprise. Clinical faculties, rewarded for the "personal and identifiable services" provided patients, began to optimize their incomes by emphasizing medical services over teaching and research. Faculty arrangements, which differ from institution to institution, encouraged this by funneling payments for patient care services to teaching physicians and the medical schools and teaching hospitals in which they practice.

Whether administered by the medical school, an individual medical department, or a physician practice plan, such arrangements over time have blurred the roles of faculty and clinicians in training and the missions of medical schools and teaching hospitals. They have also made it difficult to determine what the costs of graduate medical education are and what the federal contribution should be.

It was not until the 1990s that changes in the health care market—specifically, the growth of managed care entities—put new pressure on workforce supply, demanding clarity in workforce policy. As the U.S. health care industry moved from office- and hospital-based practices dominated by the health professions to large, centrally controlled health-care systems, managed care began to put pressure on the medical education enterprise to compete for services in integrated health plans, to produce primary-care practitioners, and to train in ambulatory settings, where the majority of care in this country is now delivered. Because GME is for the most part based in the inpatient hospital setting, the incongruity between where services are provided and where training takes place is becoming increasingly apparent to policymakers.

Coming at a time when competition in providing managed care is the basis of most major health
systems reform proposals, the medical education enterprise, largely made up of AHCs, faces major challenges in the years ahead. (See NHPF Issue Brief No. 640, January 19, 1994, "Academic Health Centers: Victors or Victims of Health Reform?") Many of these challenges are contained in or implied by provisions in overall or specific medical education reform proposals now before Congress.

GOALS OF REFORM

Setting the stage for reform, the Council on Graduate Medical Education (COGME) in 1991 issued its recommendations for physician workforce reform, Improving Access to Health Care through Physician Workforce Reform. PPAC addressed GME reform in its 1993 Annual Report to Congress and built upon that base in its 1994 report. Although hospital-oriented due to its Medicare PPS mandate, ProPAC began to look at how GME and other health training activities are organized and eventually concluded that GME payments should be made to training programs rather than directly to hospitals (see ProPAC's March 1, 1994, Report and Recommendations to the Congress). Medical societies—initially the "big three" primary-care groups, the American Academy of Family Physicians, American College of Physicians (ACP), and American Academy of Pediatrics—examined workforce policies and advocated changes in them. Foundations—most prominently, the W.K. Kellogg Foundation, Josiah Macy, Jr. Foundation, Pew Charitable Trusts, and Robert Wood Johnson Foundation-funded demonstrations and commissions to explore various aspects of reform.

Reflecting these changes, the major health systems reform proposals would make medical education revisions of various kinds. So would the "stand-alone" medical education reform bills.3

The proposals have provisions that respond to what the national policy goals should be for medical education, who should be mandated to pay for it and how the payments should be processed, how the number and mix of residency positions should be determined, what the training settings should be, how accreditation should be accomplished, how the transition from the current to the reformed system should be made, and a few miscellaneous items. Following are brief overviews of these categories:

- **National policy goals**—Although there is variance from proposal to proposal, the policy goals center on achieving a greater balance between specialist and generalist physicians relative to aggregate supply. Some proposals also would envision an increase in the supply of mid-level practitioners (certified nurse practitioners, certified nurse-midwives, and physician assistants). Most of the proposals would create a national commission, council, or board to set workforce goals and make recommendations on allocation of resources.

- **Funding mandate**—Some of the proposals would require all public and private payers of health care services to contribute to a national fund or pool to finance graduate medical education. Others apply only to Medicare DME and IME. The president's plan would require teaching hospitals to compete with other hospitals and would recognize the additional patient service costs associated with teaching by establishing an "AHC" account with funds distributed along the lines of current IME payments.

- **Processing of payments**—The proposals include various ways of handling GME payments. Administering an all-payer pool according to policy goals, establishing a new health professions workforce fund, targeting IME to hospitals meeting certain workforce supply and training goals, and continuing DME but eliminating IME payments are some of the options. To distribute the payments, some of the plans would foster creation of consortia of organizations involved in GME. Others would provide the funds directly to teaching hospitals or training programs.

- **Determination of the number and mix of residency positions**—Some of the proposals would limit the aggregate number of entry residency positions to 110 percent of U.S. medical graduates. Others would give the national commission, council, or board (see "national policy goals" above) power to allocate the number and mix of slots or a functional

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3The Primary Care Workforce Act, sponsored by Reps. Henry Waxman (D-Calif.) and Benjamin Cardin (D-Md.) and Sens. John Rockefeller (D-W.Va.) and Dave Durenberger (R-Minn.), and the Primary Medical Care Act, introduced by Sens. Nancy Kassebaum (R-Kans.) and Alan Simpson (R-Wyo.).
role in making recommendations on them. Some proposals would retain the status quo.

- **Training settings**—All of the proposals at least give lip service to increasing training in ambulatory settings. Some would use consortia to encourage such training. Some would give more support to programs that have a greater proportion of training in primary-care settings, such as HMOs and community clinics. Some would provide direct payments to ambulatory facilities for training.

- **Accreditation**—Most would not change the current accreditation process. Two of the proposals would require the accrediting body to submit a plan to the national board.

- **Transition**—Some of the plans include provisions for retraining specialists to be primary care physicians. Some also would give transitional relief to teaching hospitals that lose residency positions (and hence a relatively inexpensive source of skilled labor).

- **Miscellaneous**—Some of the proposals would increase funding for National Health Service Corps scholarships and loan repayment programs, nurse practitioner and physician assistant training, education of underrepresented minorities and disadvantaged persons, primary care research, and/or rural health projects.

THE FORUM SESSION

Formatted as a briefing with opportunity for participants to interact with the three presenters, the session will address these questions:

- Why is the current medical education system structured as it is? What incentives drive it? What are the major structural barriers to meeting future workforce needs?

- What is the training, service delivery, and research nexus of GME? Is it possible to tease out the commingled components?

- What do policymakers—steeped in budget debates over GME payments to teaching hospitals—need to know about medical education and medical schools? Are they familiar with only part of the story?

- What are the major reforms that are under consideration to change the medical education system and alter federal support of it? Are they significant? What is the outlook for enactment?

The briefing will open with a short historical overview by **Ruth S. Hanft, Ph.D.**, a professor in GWU's Departments of Health Services Management and Policy and Health Care Sciences. She also will provide an overview of the intricacies of GME. Previously a research professor at the university, which she joined in 1988, she has been involved in numerous foundation-supported health services and health professions initiatives, as well as studies sponsored by PPRC, the Institute of Medicine, Lewin/VHI, and other organizations. Earlier in her career, she held posts with the Association of Academic Health Centers; DHHS (as deputy assistant secretary for health research, statistics, and technology and director of the Office of Program Development and Planning); and Dartmouth Medical School. She serves on numerous commissions and boards, including the board of Meharry Medical College.

**Jordan J. Cohen, M.D.**, who assumed the post of president and chief executive officer of the AAMC in April, will review medical education and medical school issues. For the previous six years, he was dean of the School of Medicine at the State University of New York at Stony Brook. Prior to that he was chair of medicine at Michael Reese Hospital and vice chair of medicine at the University of Chicago. Earlier, he was chief of the Renal Division at Tufts-New England Medical Center. He trained in internal medicine with a fellowship in nephrology, and has served as regent and vice chair of ACP's Board of Regents, president of the Association of Program Directors for Internal Medicine, and chair of the RRC for Internal Medicine. He also chaired ACGME and the AAMC Task Force on the Generalist Physician.

**Michael M. Hash** will address pending proposals to reform the medical education system. Senior staff associate to the Subcommittee on Health and the Environment, House Energy and Commerce Committee, he helped to develop the Waxman-Cardin Primary Care Workforce Act. He is responsible for legislation on the Medicare program and comprehensive health care reform, as well as on quality assurance, health services research, and organ transplantation. Prior to joining the subcommittee, he spent 10 years as a principal officer of Health Policy Alternatives, Inc., a Washington consulting firm. From 1973 to 1980, he directed the AHA's Division of Legislation and other activities related to the association's federal relations and communications programs. He has served on the boards of Providence Hospital and the District of Columbia Hospital Association.