HEALTH POLICY REPORT

Health Reform, Primary Care, and Graduate Medical Education

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The administration of President Barack Obama and its congressional allies, having wrested a vast health care reform bill from Republicans who were united in opposition, are moving rapidly to implement the new law.[1] The law requires that every eligible American (about 95% of the population) carry medical insurance; only undocumented immigrants are ineligible for coverage. If the individual mandate passes the constitutional challenge raised by a number of states,[2] some 30 million uninsured people will need to obtain coverage by 2014 or pay a financial penalty for not doing so.

However, mandated coverage is only one of many challenges facing Democrats as they implement the most sweeping piece of social legislation since the enactment of Medicare and Medicaid. Another challenge that has attracted far less attention is whether newly insured individuals will actually have access to health care once they become insured and whether Medicare should expand its support of graduate medical education (GME) training to increase capacity. The law takes only modest steps to expand the workforce, which is already stretched in some geographic areas and in some specialties. In the past 4 years, 15 institutions have announced their intention to start a new medical school, but unlike the proliferation of such schools in the 1960s and 1970s, the current wave of development is occurring without federal assistance.[3-5]

In this report, I will address four themes that connect GME to recent developments: enactment of the reform law; a recent surge in support for primary care that is linked to a concern that as coverage expands, workforce capacity will be inadequate; a continuing controversy over whether teaching hospitals are overpaid; and new concern that existing training programs do not adequately address subjects that are important to young doctors who will practice in a changing environment.

Of the federal programs that support GME (e.g., Medicare, Medicaid, and the Departments of Defense and Veterans Affairs), Medicare provides the most money — $9.5 billion to teaching hospitals in 2009 to support the training of about 100,000 residents. Medicare has recognized the costs that teaching hospitals incur in sponsoring GME programs in two ways. In 2009, it provided direct payments of $3 billion to teaching hospitals to cover a share of resident stipends and other allowable expenses, and it provided $6.5 billion as an indirect medical education adjustment to cover the added costs in patient care associated with training. A recent survey of state governments showed that their support for GME had dropped in recent years. In 2005, a total of 47 states provided total support of $3.78 billion through their Medicaid programs; by 2009, only 41 states were providing $3.18 billion in such support, and 9 additional states reported that they had considered ending their payments to teaching hospitals.[6] In the face of this decline in funding, the completion of a GME training program is still a legal requirement to securing a license to practice medicine in the United States.

UNCERTAINTY IN CONGRESS OVER GME POLICIES

The most prominent signal that Congress is uncertain about whether to revise Medicare's GME policies came during the recent discussions on health care reform. Despite calls by leading Democrats, legislators declined to expand the number of Medicare-funded GME positions by 15% (to 115,000). Congress was willing only to redistribute about 900 unused but authorized GME positions that the program would support. The law directs that most of these positions should be used to train primary care physicians and general surgeons.

Congress arrived at this decision for multiple reasons. For one, legislators recognized that since 1997, when the Balanced Budget Act im-

posed a cap on the number of GME positions that Medicare would support, teaching hospitals have created some 8000 new training positions without Medicare funding, and most of them are subspecialty fellowship positions, not primary care posts.[7] In addition, increasing the proposed number of Medicare-funded positions by 15,000 would have added about $15 billion to the cost of a reform bill that was already under Republican fire for its estimated 10-year price tag. But perhaps most important to future deliberations, there is no consensus in Congress or within the health professions on what role government should play in determining the mix of providers and whether the heavy reliance on Medicare should remain as GME moves to more ambulatory sites where care is provided mostly to non-Medicare patients.

MIXED MESSAGES ON PRIMARY CARE

As the reform debate unfolded, the administration and congressional leaders, through various actions and statements, recognized that an integral component of expanding coverage would be ensuring a workforce composed of an appropriate mix of generalist and specialist physicians. Among policymakers, expanding the capacity of the workforce to deliver primary care came through as a resounding priority. Only 4 weeks after taking office, Obama signed into law a $787 billion economic stimulus package that provided about $500 million for training programs in health professions, including a $300 million expansion of the National Health Service Corps, which recruits primary care providers. In July 2009, when Health and Human Services Secretary Kathleen Sebelius announced disbursement of a portion of these funds, she said, "Health systems reform cannot happen without an adequate supply of well-trained, well-distributed providers." On June 16, Sebelius announced the release of another $250 million to support the training of "more than 16,000 new primary care providers over the next 5 years."

In November 2008, Senator Max Baucus (D-MT), chair of the Senate Finance Committee, who represents a state with chronic shortages of physicians and nurses, published a monograph that called for "strengthening the role of primary care and chronic care management."[8] On March 12, 2009, Baucus convened a committee hearing to take testimony on "Workforce Issues in Health Care Reform: Assessing the Present and Preparing for the Future." At the time, Baucus said in a statement: "For health reform to succeed, we need a strong health care workforce. . . . Volumes of research have been published on the problems facing our national health workforce. But there is no clear strategy." Senator Chuck Grassley of Iowa, the Finance Committee's ranking Republican, said in a separate statement: "It is easy to see that increased health coverage is useless without a workforce to provide care. . . . In Massachusetts, health reform efforts have increased the number of people covered, but there are reports that many people are now finding it difficult to find and get appointments with primary care providers."

Underscoring the concern over the scarcity of primary care providers and the income gap between generalists and specialists,[9] the law awards a 10% bonus for 5 years under the Medicare fee schedule, beginning in 2011, to family doctors, internists, geriatricians, nurse practitioners, and physician assistants who provide 60% of services in qualifying evaluation and management codes. The adjustment will not change the fees that Medicare pays to specialists. The law also requires states to increase Medicaid payment rates to Medicare levels in 2013 and 2014 for providers who deliver certain primary care services.

Other forms of support for primary care have emerged as well. A draft report prepared by the Council on Graduate Medical Education that has been approved but not yet officially released by the Department of Health and Human Services emphasizes that a shortage of primary care physicians overshadows deficits in all other specialties. The report's major recommendation is that GME policies should be designed so that the number of primary care physicians among all doctors would increase from the current estimate of 32% to at least 40%. Other signs of support for primary care are coming from a multisector coalition known as the Patient-Centered Primary Care Collaborative,[10] a report produced by a group of medical leaders,[11] and a leading policy journal that devoted an entire issue to the subject.[12]

By comparison, when it comes to graduating medical students who are actually opting for careers in primary care, as measured by the residency training positions they secure, interest falls precipitously and has for a decade or more.[13]

Table 1. Match Summary for 24,378 Residents in the National Resident Matching Program, 2010.*

Primary Care Specialty	No. of Positions Filled in the Match	Percentage of Residents Likely to Practice Primary Care	No. of Residents Likely to Practice Primary Care
Family medicine	2384	91	2169
Internal medicine	4947	10–20	495–989
Pediatrics	2383	44	1049
Medicine with pediatric specialty	355	50	178
Residents likely to practice primary care†			3891–4385

* Data regarding positions that were filled in the 2010 match are from the National Resident Matching Program.[15] Data on the proportions of residents who are likely to practice primary care are from Bein[16] for family medicine, Garibaldi et al.[17] for internal medicine, and Freed et al.[18] for pediatrics.
† The proportion of all residents who reported being likely to practice primary care ranged from 16 to 18%.

The upcoming report of the Council on Graduate Medical Education estimates that among 24,378 medical students who were matched to residency training positions in 2010, between 3891 and 4385 plan careers as primary care physicians.[14] Thus, only 16 to 18% of medical students who obtained positions through the National Resident Matching Program in 2010 are likely to practice primary care (Robertson R: personal communication) (Table 1).[15-18] The 2010 match results are "not encouraging for adults needing primary care," according to a March 18 statement by the American College of Physicians.[19] The group estimated that 20 to 25% of internal medicine residents are now specializing in general internal medicine, as compared with 54% in 1998. The remaining residents are pursuing a subspecialty of internal medicine, such as cardiology or gastroenterology.

EFFORTS TO REDUCE GME SUPPORT

While senior policymakers were emphasizing the importance of primary care, their concern about a shortage of such practitioners subsided in the face of the high price tag of the reform proposal and the absence of a consensus with respect to how to address the issue in a fundamental way. As a result, virtually all of the law's cost (an estimated $938 billion over 10 years) was allocated to expanding coverage. Teaching hospitals staved off reductions in Medicare's indirect medical education adjustment, but they will absorb other spending reductions that are part of the reform package. All hospitals will absorb lower payment updates for Medicare services, reductions in their disproportionate share adjustment (paid to facilities that treat a large share of low-income patients), and a portion of other cuts that will total an estimated $155 billion over 10 years. Hospitals agreed to these reductions as a concession negotiated with the White House in exchange for a presumed reduction in the burden of uncompensated care as medical coverage expands.

In addition, the law authorizes the creation and expansion of an array of smaller health care workforce programs that would assume tasks that the private market is unlikely to undertake (Rasouli T: personal communication) (Table 2). One of the most controversial provisions directs the Department of Health and Human Services to award grants ($230 million over 5 years) to eligible "teaching health centers" to establish new accredited primary care residency programs or to expand existing programs. Eligible facilities would include federally qualified health centers, mental health centers, rural clinics, and other community-based entities. Initially, the Association of American Medical Colleges lobbied against the proposal, but when the source of funding was redirected from Medicare, where these new centers could compete for that program's GME dollars, to an annual appropriation, the association relaxed its opposition.

ISSUES SURROUNDING MEDICARE'S GME PAYMENTS

Another unresolved GME issue that is certain to attract increased attention as the government grapples with its mounting budget deficit is whether teaching hospitals are overpaid. In the

Table 2. Key Health Workforce Provisions in the Patient Protection and Affordable Care Act.

Creates the National Health Care Workforce Commission to analyze the supply, distribution, diversity, and skill needs of the U.S. health care workforce
Codifies the existing National Center for Health Care Workforce Analysis and establishes state and regional centers for health workforce analysis
Increases funding for programs designed to address workforce shortages, including expanding the National Health Service Corps and higher loan amounts for physicians, nurses, allied professionals, and public health workers in primary care
Establishes a primary care extension program to educate providers about health promotion, chronic disease management, mental health services, and evidence-based therapies
Authorizes grants to geriatric education centers to support training for clinical faculty and family caregivers in geriatrics, chronic care management, and long-term care
Authorizes development grants and payments to centers specializing in ambulatory patient care that are eligible for sponsoring physician residency programs in primary care
Modifies rules governing Medicare's support of graduate medical education in order to promote training in outpatient settings
Provides a 10% bonus to primary care practitioners and general surgeons for certain services (pertains only to general surgeons who practice in geographic areas with a shortage of health care professionals)
Creates the Center for Medicare and Medicaid Innovation to research, develop, test, and expand innovative models for payment and delivery of services, including the medical home
Directs the health and human services secretary to redistribute 65% of currently unused residency positions and directs 75% of those slots to primary care and general surgery and to states with the lowest ratios of resident physicians to patients
Directs the health and human services secretary to establish demonstration programs for hospitals to increase graduate nurse education training under Medicare

years before reform, the Congressional Budget Office,[20] the Medicare Payment Advisory Commission (MedPAC),[21] and the administration of President George W. Bush[22] asserted that this was indeed the case. In the early stages of the reform debate, top White House staff members privately discussed the prospect of reducing Medicare's indirect medical education adjustment as a way to offset the cost of reform, but they never proposed it publicly, fearing that it might ignite opposition to reform among hospitals.

For three consecutive years (2007 through 2009), MedPAC recommended that Congress reduce Medicare's indirect medical education adjustment, which totaled $6.5 billion in 2009 and somewhat less in the 2 previous years, by about $1 billion because the commission asserted that these payments are "set at more than twice what can be empirically justified, directing more than $3 billion in extra payments to teaching hospitals . . . without any restriction on how they are used."[21] The commission proposed that the savings be redirected to support a pay-for-performance program among all hospitals. Congress did not accept any of these proposals to reduce the indirect medical education adjustment.

Rather than repeating its earlier recommendation, MedPAC voted unanimously (17-0) at its most recent meeting (April 1 and 2, 2010) to cut the $3.5 billion in "extra payments" from the indirect medical education adjustment and use this amount to fund incentive payments to teaching institutions that would be contingent on their reaching new educational outcomes and standards. The recommendation, the most sweeping of five approved unanimously by the commission, stipulates that after consulting widely with stakeholders, the health and human services secretary would establish standards for the evaluation of GME programs before they received what the commission labeled "performance-based" payments (for details, see the Supplementary Appendix, available with the full text of this article at NEJM.org). Among the standards that GME programs would have to meet are practice-based learning and improvement, interpersonal communication skills, professionalism, and systems-based practice, including the integration of community-based care with inpatient care.

In its June 2010 report, MedPAC said: "Only those institutions meeting these criteria should be eligible for such incentive payments; conceivably, therefore, all, some, or none of this amount could be distributed, based on program and institutional performance. Future assessment of the GME payment system might consider making even

larger portions contingent on performance."[23] In describing the commission's rationale, its chair, Glenn Hackbarth, who was instrumental in persuading every commission member to support the GME recommendations, said at the April meeting, "The idea in my mind is to use Medicare payment for GME as a lever, a way to support people within the GME system who know that we need to do a better job in preparing physicians for the health care delivery system of tomorrow."

On June 23, the House Energy and Commerce Subcommittee on Health convened a hearing to take testimony on MedPAC's June report. At the hearing, several committee members, including subcommittee chair Frank Pallone (D-NJ), expressed concern over the potential impact of the commission's major GME recommendation. Pallone asked Hackbarth, "Can hospitals that operate on very slim margins or in the red, like those in my state of New Jersey, continue to operate and provide the same level of services if they begin to lose GME funding?" Hackbarth and the commission have emphasized that it is not recommending cutting Medicare's GME funding but rather redirecting its uses.

MedPAC conceded in its report that the Accreditation Council for Graduate Medical Education had begun instituting outcome-based standards for some of these newer skills and competencies, but "progress on them has been slow. . . . The commission recommends that Medicare institute financial incentives to accelerate these efforts."[23]

Similar standards were embedded in the reform bill passed by the House, but they were not included in the final reform measure. The House bill also called for an evaluation of GME programs by the Government Accountability Office (GAO) to determine whether these goals were being achieved. The proposed GAO report, which the Association of American Medical Colleges strongly opposed, was modeled after a study conducted by RAND researchers under contract to MedPAC.[24]

MIXED REACTION TO MEDPAC'S GME RECOMMENDATIONS

Dr. Thomas Nasca, the accreditation council's chief executive officer (CEO), said in a telephone interview that overall he regarded MedPAC's top recommendation as "constructive" in that it would provide the council leverage with GME programs to accelerate their adoption of its required "competencies," thus avoiding imposition of government standards. In most respects, the standards that MedPAC recommends mirror those of the accreditation council, but in the case of the commission's proposed standards, teaching hospitals would pay a hefty price if they failed to meet them.

Other reactions to the MedPAC recommendation were mixed. The American Medical Association expressed opposition, saying in a statement: "We are pleased that the commission has taken note of changes that the medical education community has already implemented to move to outcomes-based competencies and assessments. However, we do not think that the best way to foster the work of the [accreditation council] . . . is to create a new federal bureaucracy to create new standards, determine how well almost 10,000 residency programs are adhering to these standards, and then allocate $3.5 billion in Medicare dollars accordingly." The Association of American Medical Colleges also took exception to MedPAC's recommendations, saying they "could be potentially very destabilizing to institutions and training. . . . It is doubtful that CMS/HHS [the Centers for Medicare and Medicaid Services of the Department of Health and Human Services] could come up with standardized, meaningful measures in these areas better than [the accreditation council]" (Grover A: personal communication). In an interview, Dr. Stephen Shannon, CEO of the American Association of Colleges of Osteopathic Medicine, said: "I think the proposed recommendations capture many of the issues that need to be addressed in our GME system. . . . My biggest concern is that if CMS implements the changes, they would disrupt and damage the current system during any process of transformation."

ROLE OF LEADERS OF TEACHING HOSPITALS

Leaders in academic medicine have acknowledged that Medicare's current GME policy will come under increased scrutiny and have recognized the urgency of forging a consensus around an alternative approach rather than having government thrust new policies on them. These and

similar questions dominated discussions at the spring meeting of the Council of Teaching Hospitals of the Association of American Medical Colleges. Steven H. Lipstein, council chair and CEO of BJC HealthCare in St. Louis, said that discussions focused on two main topics: how to define useful and nonuseful variations in clinical practice patterns, a subject that Congress, in the new health law, directed the Institute of Medicine to study; and how teaching institutions can restructure "systems" of care, accelerate team-based learning among health professionals, and participate in testing new payment models. In an interview, Lipstein said: "As stewards of Medicare's GME support, we must assist Congress in determining whether these programs are producing a corps of IT [information technology]-literate, patient-safety sophisticated medical professionals in the right combination of specialties for a reformed delivery system. Teaching hospitals must continuously adapt and improve graduate medical education to validate Medicare's continuing support for GME."

CONCLUSIONS

Whether Medicare should pay for GME has been a source of controversy for much of the program's 45-year history.[25] As the vast expansion of coverage that is called for in the reform law approaches in 2014, Congress will have to decide whether to expand Medicare's GME support and how to define with greater clarity the roles that federal and state governments will play in shaping the workforce. The law also calls for major reforms of the delivery system and payment methods for providers. It directs the CMS to test an array of approaches that could improve the delivery system, including patient-centered medical homes, health care innovation zones, accountable care organizations, and bundled payments for episodes of care. At the time of the law's enactment, Dr. Darrell Kirch, the CEO of the Association of American Medical Colleges, said in a statement, "The nation's medical schools and teaching hospitals now stand ready to work with the administration and Congress to advance significant changes to our health care delivery system."

These developments, combined with the urgency of addressing the federal deficit, should serve as a signal to the academic medical community that simply preserving the existing Medicare GME policy is no longer a defensible long-term strategy. Kirch's statement and the dialogue at the meeting of the Council of Teaching Hospitals suggest that some academic leaders have heard the call. Now their challenge is to prod their colleagues to pursue constructive change in ways that both strengthen the enterprise and respond to the pressing needs of society.

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1. Sebelius K. Letter to House Speaker Nancy Pelosi, Senate Majority Leader Harry Reid, House Minority Leader John Boehner, and Senate Minority Leader Mitch McConnell, May 10, 2010.
2. Aizenman NC. Health-care overhaul is up against long campaign across U.S. Washington Post. May 12, 2010:A4. (Accessed July 15, 2010, at http://www.washingtonpost.com/wp-dyn/content/article/2010/05/11/AR2010051104719.html.)
3. Whitcomb ME. New medical schools in the United States. N Engl J Med 2010;362:1255-8.
4. *Idem.* New and developing medical schools: motivating factors, major challenges, planning strategies. New York: Josiah Macy, Jr. Foundation, 2009.
5. Iglehart JK. Grassroots activism and the pursuit of an expanded physician supply. N Engl J Med 2008;358:1741-9.
6. Henderson TM. Medicaid direct and indirect graduate medical education payments: a 50-state survey. Washington, DC: Association of American Medical Colleges, 2010.
7. Whitcomb ME. Physician supply revisited. Acad Med 2007;82:825-6.
8. Baucus M. Call to action: health reform 2009. Washington, DC: Senate Finance Committee, 2009.
9. Bodenheimer T, Berenson RA, Rudolf P. The primary care–specialty income gap: why it matters. Ann Intern Med 2007;146:301-6.
10. Grundy P, Hagan KR, Hansen JC, Grumbach K. The multistakeholder movement for primary care renewal and reform. Health Aff (Millwood) 2010;29:791-8.
11. Cronenwett L, Dzau V. Cochairs summary of the conference. In: Culliton B, Russell S, eds. Who will provide primary care and how will they be trained? New York: Josiah Macy, Jr. Foundation, 2010.
12. Dentzer S. Reinventing primary care: a task that is far "too important to fail." Health Aff (Millwood) 2010;29:757.
13. Garibaldi RA, Popkave C, Bylsma W. Career plans for trainees in internal medicine residency training programs. Acad Med 2005;80:507-12.
14. Council on Graduate Medical Education. 20th Report on advancing primary care. (Not yet released by HHS but approved by the council.) Washington, DC: Health Services and Resources Administration, Department of Health and Human Services, 2010.
15. National Resident Matching Program. Advance data tables: 2010 main residency match, Table 1. Washington, DC: National Resident Matching Program, 2010. (Accessed July 15, 2010, at http://www.nrmp.org/data/advancedatatables2010.pdf.)
16. Bein B. Match results: 2010 fill rate for family medicine highest ever. Washington, DC: American Academy of Family Physicians, 2010. (Accessed July 15, 2010, at http://www.aafp.org/online/en/home/publications/news/news-now/resident-student-focus/20100318matchresults.html.)
17. Garibaldi RA, Popkave C, Bylsma W. Career plans for trainees in internal medicine residency programs. Acad Med 2005;80:507-12.

18. Freed GL, Dunham KM, Jones MD Jr, et al. General pediatrics resident perspectives on training decisions and career choice. Pediatrics 2009;123:Suppl 1:S26-S30. (Accessed July 15, 2010, at http://pediatrics.aappublications.org/cgi/reprint/123/Supplement_1/S26.)
19. American College of Physicians. Residency match results not encouraging for adults needing primary care. News release, March 18, 2010. (Accessed July 15, 2010, at http://www.acponline.org/pressroom/residency_match.htm.)
20. Congressional Budget Office. Budget options, vol. 1: health care. Washington, DC: Congressional Budget Office, 2008. (Accessed July 15, 2010, at http://www.cbo.gov/ftpdocs/99xx/doc9925/12-18-HealthOptions.pdf.)
21. Report to the Congress: aligning incentives in Medicare. Washington, DC: Medicare Payment Advisory Commission, 2009.
22. Department of Health and Human Services. Fiscal year 2010 budget in brief. Washington, DC: Department of Health and Human Services, 2009. (Accessed July 15, 2010, at http://dhhs.gov/asfr/ob/docbudget/2010budgetinbrief.html.)
23. Report to the Congress: aligning incentives in Medicare. Washington, DC: Medicare Payment Advisory Commission, 2010.
24. Cordasco K, Horta M, Lurie N, Bird CE, Wynn BO. How are residency programs preparing our 21st century internists? A review of internal medicine residency programs' teaching on selected topics. Contractor report prepared for the Medicare Payment Advisory Commission. Santa Monica, CA: RAND, 2009 (report no. WR-686, 2009).
25. Newhouse JP, Wilensky GR. Paying for graduate medical education: the debate goes on. Health Aff (Millwood) 2001;20:136-47.