# Financing Graduate Medical Education in Primary Care: Options for Change

Sandra C. Peinado, MD, MGA, and John M. Eisenberg, MD, MBA
*Edison, New Jersey, and Philadelphia, Pennsylvania*

*The current mechanisms of graduate medical education (GME) financing favor inpatient and procedural care, making the support of primary care programs difficult, as these residencies are oriented toward outpatient evaluation and management. Criteria for evaluating proposals that aim to improve the financial support of primary care programs include the financial, administrative, and educational implications of the options as well as the views of interested stakeholders. Other sources of funding for primary care GME are changes in existing Medicare payments; increased categorical GME funding, ambulatory payment, and grants; commitments from future employers; and redistribution of current funds. Alternatives for spending these funds to aid primary care programs include dividing the sources in three ways: on a per-resident basis, by competitive grants, or by incentives for primary care education. An analysis of the alternatives for changing GME financing shows that several solutions will be needed simultaneously.* **J FAM PRACT 1990; 31:637-644.**

The education of primary care physicians is of growing national concern. Graduate medical education (GME), however, is principally funded through payment for inpatient care. Because primary care programs emphasize outpatient education and do not involve lucrative procedures that could help to subsidize education, these programs are less likely to be supported adequately by patient care revenue. Alternative sources for improved funding of primary care GME must be identified to fulfill the nation's need for an adequate supply of well-trained primary care physicians.

The current mechanisms for funding GME and the resulting difficulties encountered by primary care programs were reviewed recently.[1,2] Funds for residency programs are generated primarily from direct and indirect payments from Medicare Part A, physician payments from Medicare Part B, and reimbursement by Medicaid and private insurers. Additional funds are derived from direct federal support, such as the Veterans Administration (VA) and Title VII of the Public Health Service Act, and from state and local support.

This paper explores possible sources of support for primary care GME and ways of appropriately spending that money. To evaluate the ways in which funding for primary care GME might be obtained, several criteria are proposed against which the available options may be weighed.

## CRITERIA FOR EVALUATING ALTERNATIVE PROPOSALS

Any proposal for altering the current mechanism of financing GME to improve primary care training should be judged from four viewpoints: (1) financial implications, (2) administrative requirements, (3) educational impact, and (4) views of interested stakeholders (Tables 1 and 2). To use these criteria to evaluate options for funding primary care GME, the complexity of the interrelations among these criteria must be considered. Simply adding up a score of how well any one proposal meets the individual criteria may oversimplify its relative advantages or disadvantages. Any one proposal should not be expected to satisfy all criteria, but by judging all proposals against the

*Submitted, revised, August 20, 1990.*

*From the Family Practice Residency, John F. Kennedy Medical Center, Edison, New Jersey, and the Section of General Internal Medicine, University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania.* *This paper was adapted from a report to the Committee to Study Strategies for Supporting Graduate Medical Education in Primary Care, Institute of Medicine, National Academy of Sciences, April 17–18, 1989. Requests for reprints should be addressed to Sandra C. Peinado, MD, MGA, J. F. Kennedy Medical Center, Family Practice Center, 65 James St, Edison, NJ 08818-3059.*

**TABLE 1. CRITERIA FOR EVALUATING ALTERNATIVE PROPOSALS FOR GRADUATE MEDICAL EDUCATION FINANCING**

| Category | Criteria |
|---|---|
| Financial | The proposal should be neutral for the federal budget |
| | All those who benefit from GME in primary care should contribute to its costs |
| | Funding should be predictable |
| | Funding should be sufficient |
| Administrative | Implementation should be feasible |
| | Ongoing administration should be simple and inexpensive |
| Educational | Curricular autonomy and flexibility should be maintained |
| | Primary care curricular elements should be fostered and developed |
| | High-quality programs in nonprimary care specialties should not be adversely affected |
| | Incentives should favor high-quality primary care programs |

same set of criteria, certain options may be found to make more sense than others.

## Financial Criteria

*The proposal should be budget-neutral, at least for the federal budget.* During a time of fiscal constraint for the US Government, it would be politically unfeasible to raise total federal spending substantially for GME. An increase in funding for primary care education would therefore probably require decreases in funding for other federal expenditures not necessarily, but probably, related to GME.

The ideal of social budget neutrality also suggests that a reduction in other outlays would probably be required to identify additional funds for primary care education. These cutbacks would likely be in the health care sector. Although these reductions may be taken from the funds available for hospital or physician payment, they could also result in decreased profits or surpluses for third party payers or managed care systems, reduced state expenditures in other areas, lower salaries for residents or faculty, or decreased funding available for medical care services. Politically more difficult, but possible, would be increased health insurance premiums, surcharges, or higher taxes.

*All those who benefit from GME in primary care should contribute to its costs.* All who benefit from high-quality education of primary care physicians should contribute to its costs. These recipients include hospitals, patients, health maintenance organizations (HMOs), physicians themselves, payers (eg, Health Care Financing Administration [HCFA], insurance companies), and society as a whole.

*Funding should be predictable.* The financing of GME should not vary from year to year to such an extent that programs find it impossible to plan for several years in advance. Program directors need to be exempt from year-to-year uncertainty in funding to develop stable, high-quality residencies. Policymakers, both professional and governmental, also need to be able to predict funding and expenditure levels for the near future.

*Funding should be sufficient.* The support of GME in primary care should be enough to cover all reasonable costs. The definition of "sufficient" should include some mechanism for adjusting to the shifting nature of GME. Curricula for primary care residencies will change, of

**TABLE 2. STAKEHOLDERS AFFECTED BY ALTERNATIVE PROPOSALS FOR GRADUATE MEDICAL EDUCATION FINANCING**

| | |
|---|---|
| Society | Primary care specialties |
| Federal government | Nonprimary care specialties |
| Health Care Financing Administration | Primary care educators |
| State government | Nonprimary care educators |
| Private payers | Medical school officials |
| Teaching hospitals | Primary care residents |
| Nonteaching hospitals | Nonprimary care residents |
| Physicians | Patients |

necessity, and funding should be flexible enough both to adapt to those changes and to allow the decisions for curricular change to remain in the control of qualified educators. The percentage of residents' time spent in an ambulatory setting is expected to increase, and sufficient funding options should be able to cover the cost of that increase. Sufficient funding may be limited to the training of all graduates of American medical schools, to all teaching hospital positions, or to all graduates who agree to fill federal manpower needs.

### Administrative Criteria

*The implementation of any proposal should be administratively feasible.* The initiation of any new funding scheme should be simple and not unduly expensive. If new administrative mechanisms are required, the design and development of these mechanisms could delay, complicate, or even prevent effective deployment of the funds to support primary care education.

*The ongoing administration of any new funding scheme should be simple and inexpensive.* Ideally, present administrative mechanisms should be simplified rather than made more complex. Administrative complexity would make the program difficult to monitor and unwieldy to payers, hospitals, and educators. To maximize the portion of funds available for the support of primary care education, the ongoing administration of the program should be designed to minimize the bureaucratic overhead required at all levels, from payer to educator.

### Educational Criteria

*Curricular autonomy and flexibility should be maintained.* The funding of GME in primary care should provide autonomy to educators in the choice and implementation of curricula, as well as flexibility in the development of innovative educational programs.

*Primary care curricular elements should be fostered and developed.* Changes in GME financing should provide incentives for developing and strengthening primary care in established programs. This support applies not only to the creation of primary care elements within traditional internal medicine and pediatric programs, but also to the maintenance of family medicine curricula and already established programs in primary care internal medicine and pediatrics. In internal medicine and pediatrics, emphasis should be placed on transforming traditional programs to a primary care focus rather than on adding still more residency positions.

*High-quality programs in nonprimary care specialties should not be adversely affected.* If any change in GME funding results in decreased funding to nonprimary care specialties, a mechanism should be adopted to prevent across-the-board cuts to these programs. The better programs should not lose money, but marginal programs should be eliminated, especially in those specialties perceived to have more training positions than the nation needs. For specialties now handsomely paid for physician services, however, loss of GME financing will probably have less impact on the viability of residency programs.

*Incentives should favor high-quality primary care programs.* No specific type of program is implied here. Rather, incentives should be used to recognize programs that strive to achieve strong educational goals and are not simply sources of inexpensive manpower for their teaching hospitals.

### Stakeholders

Each of these criteria will be emphasized differently by the various entities that are interested in or affected by changes in GME financing. While the response of any specific individual or individual organization to any one option cannot be predicted (with the exception of HCFA), exploring the large number of stakeholders in the development of funding sources for primary care GME is useful.

*Society:* US citizens who benefit from an adequate supply of well-trained physicians, and tax payers whose dollars contribute to the training of physicians

*Federal government:* Congress, elected officials, and federal departments and agencies

*HCFA:* Considered separately because of its particular interest in, and importance to, the policies discussed

*State government:* State legislatures, elected officials, and agencies

*Private payers:* Insurance companies, self-insured businesses, HMOs, preferred provider organizations (PPOs), individual practice associations (IPAs), and employers who contribute to a health insurance plan

*Teaching hospitals:* Hospitals that support programs in graduate medical education

*Nonteaching hospitals:* Hospitals that do not support programs in graduate medical education

*Physicians:* Licensed physicians and their representative professional organizations (eg, American Medical Association)

*Primary care specialties:* Physicians in internal medicine, pediatrics, and family medicine, as well as their professional organizations, specialty certifying boards, and residency review committees

*Nonprimary care specialties:* Physicians in all other medical and surgical specialties, as well as their certifying boards, professional organizations, and residency review committees

*Primary care educators:* Faculty of residency and fellowship programs in primary care fields and their professional organizations (eg, Society of Teachers of Family Medicine,

**TABLE 3. OPTIONS FOR SOURCES OF FUNDS FOR GRADUATE MEDICAL EDUCATION (GME)**

**Changes in Existing Medicare GME Payments**
1. Eliminate Part A direct and indirect payments
2. Eliminate Part A direct payments
3. Eliminate Part A indirect payments
4. Reduce Part A direct payments
5. Reduce Part A indirect payments
6. Limit Part A direct and indirect payments to physicians' first certification
7. Add incentives and disincentives to Part A direct payments

**Increase in Categorical GME Funding**
8. Require that Medicaid programs conform with Medicare Part A direct-cost reimbursement of GME
9. Mandate or encourage payments for GME payments by insurers and HMOs
10. Impose a tax on physician services
11. Impose a tax on nonteaching hospital services
12. Impose a tax on third-party payers
13. Impose a surcharge on physician licences

**Increase in Payment for Ambulatory Care**
14. Implement resource-based relative value scale
15. Extend outpatient insurance coverage
16. Add a Medicare Part B teaching adjustment for ambulatory sites
17. Allow resident billing to third-party payers, including cost of supervision

**Increase in Grants**
18. Foundations
19. Title VII residency support
20. Title VII faculty development grants
21. Veteran's Administration support
22. State grant support

**Commitment from Future Employer**
23. Health Maintenance Organizations
24. States
25. Public Health Service

**Redistribution of Funds**
26. Title VII money
27. Clinical income within teaching hospitals and faculties

Ambulatory Pediatrics Association, Society of General Internal Medicine)

*Nonprimary care educators:* Faculty of residency and fellowship programs in all other medical and surgical specialties

*Medical school officials:* Deans and others concerned with the financial and academic health of medical schools

*Primary care residents:* Physicians in primary care residency programs

*Nonprimary care residents:* Physicians in residency positions for other medical and surgical specialties

*Patients:* Current and potential individual users of medical care services

## FUNDING OPTIONS

Funding sources for primary care GME can be organized into the six categories shown in Table 3. In addition to these extrinsic sources of funding, primary care educators and specialty organizations should experiment with methods of improving the operating efficiency of their academic units and clinical sites, to reduce their need for outside support, and to share responsibility for the financial health of primary care education.

### Changes in Existing Medicare GME Payments

Options involving the *elimination or reduction in Medicare Part A direct and/or indirect payments* to all teaching hospitals (options 1 to 5) to free money that could be redistributed for the benefit of primary care programs can be analyzed as a group. None of these options broadens the scope of payers of GME, nor do any of the options ensure that high-quality nonprimary care programs will not be hurt. Nonprimary care specialists, educators, and residents, as well as teaching hospital administrators, can be expected to object to these options. They would need to develop new resources or to reduce attending physicians' incomes to support training.

*Limiting Medicare support to physicians' first certification* (option 6) would save money. This option, however, would not necessarily provide any additional funds to foster the growth of high-quality primary care programs, and it would limit nonprimary care residencies. If used in combination with a spending plan that involved a reallocation of the savings toward improving primary care residencies, this alternative might be more favorable. It would extend initiatives taken by Congress in the 1986 Omnibus Budget Reconciliation Act.

The option of *incorporating incentives and disincentives to Medicare Part A direct and indirect payments to favor primary care curricula* (option 7) fulfills a few criteria. This proposal would be budget-neutral, and the funding stream would be predictable. Primary care development could be encouraged by well-constructed incentives, and high-quality programs might be relatively well rewarded. Administering such an option, however, might be difficult and expensive. Nonprimary care residents, educators, and specialty organizations can be expected to object. Those administering teaching hospitals may also oppose the measure if they consider it an undue intrusion on GME and a cause of significant administrative difficulties.

Although there would be substantial resistance to major shifts in Medicare direct and indirect payments, some changes are reasonable and could benefit primary care educators.

First, the time spent by residents in ambulatory care activities on or off the premises of a teaching hospital should be included in the calculation of the number of full-time equivalent (FTE) residents of a teaching hospital for both direct and indirect payments. These shifts in the number of FTE residents need not result in an increase in

the total direct or indirect payments but should be incorporated into a recalibration of the per-resident payments.

Second, all faculty effort in primary care education, regardless of whether the faculty are classified as hospital employees, should be credited to the allowable cost of medical education included in the hospital direct medical education payment. Payments should not be frozen at their 1984 levels, but hospital administrators should be allowed to adjust their reported costs for legitimate changes in the cost of operating their training programs.

Third, a simpler administrative scheme would be to pay the same amount per resident to all hospitals, perhaps with different adjustments for geographic variation in the cost of operating programs, and perhaps with different payments for different specialties to reflect the cost of training or to incorporate incentives for the training of physicians in selected specialties.

Fourth, hospital administrators might be required to demonstrate that funds generated from direct medical education payments were actually expended on medical education. One reform would be for HCFA to pay these funds directly to the residency programs.

It would make little sense to use Medicare's indirect medical education adjustment to pay for primary care education because these indirect payments were never intended to pay for GME. Instead, they were instituted to pay for the higher cost of care in teaching hospitals. Because residents' time in ambulatory settings was included in the initial calculation of the per-resident payments, this portion of residents' time should remain in the formula, which will avoid discouraging hospital administrators from facilitating ambulatory care education.

Providing adequate health care to the indigent should be considered a separate topic, although better funding of care to the indigent would particularly benefit training programs at inner-city medical centers.

### Increase in Categorical GME Funding

The proposal that *Medicaid programs conform with Medicare Part A direct-cost reimbursement of GME* (option 8) could be implemented by requiring that Medicaid programs use at least a portion of federal matching dollars to support GME. This option would foster the growth and development of primary care programs because primary care residencies probably care for a disproportionate number of Medicaid patients. It would not specifically encourage high-quality primary care programs, but it would not hurt nonprimary care programs. Because this option is not intrinsically budget-neutral, federal and state governments would probably oppose it. If, however, a major federal program that would relieve the present burden on Medicaid were instituted (eg, mandatory employer-sponsored insurance, or a national program for long-term care insurance), then the money made available to Medicaid for other expenditures could be allocated to finance GME.

A plan for encouraging voluntary contributions for primary care GME from insurance companies and HMOs fulfills few criteria. Its primary disadvantages are that the funding stream would be unpredictable and very likely insufficient. The option of *mandatory payment* for GME (option 9) *by payers other than federal programs,* however, would more equitably distribute the responsibility of paying for ambulatory GME. This option might be facilitated, for example, by federal regulations that require HMOs to pass on that portion of their reimbursement from Medicare designated in the fee-for-service sector for the direct and indirect costs of graduate medical education (about 3% of the Medicare dollar). With the exception of insurers, stakeholders would generally favor such contributions.

The option of imposing a *sales tax on physician services* (option 10) fulfills only a few criteria and would face significant stakeholder opposition. Both the initiation and ongoing administration of such a program would be difficult and costly. Physicians (including practitioners, physician educators, and specialty organizations) and hospital administrators would probably object strongly to such taxation. Patients, too, may object if they fear the cost will be passed on to them.

Imposing a *tax on hospitals that do not substantially support GME* (option 11) recognizes that nonteaching hospitals are dependent on teaching hospitals to train their future staff physicians and fulfills the financial criteria, and the ongoing administration of such a measure would be simple and relatively inexpensive. Initiating this option, however, may be complicated and costly. Nonteaching hospitals would oppose the measure strongly and may pass on the cost to the health care consumer. Patients, too, may then object, but such a result might decrease the pricing advantage currently enjoyed by nonteaching hospitals.

A *tax or surcharge on third party payers* (including Medicare, Medicaid, insurance companies, and HMOs) (option 12) to establish a new primary care GME fund[3] would fulfill all financial and administrative criteria. All educators, specialty organizations, and hospitals would probably support the measure because it would broaden and more equitably distribute the burden of GME costs. State governments, as well as insurance companies, could be expected to oppose such a surcharge or tax. Patients, too, might object if they perceived that such a tax would result in higher prices for medical care. The federal government, however, particularly HCFA, would likely welcome being better able to share the cost of GME with other payers.

A *tax or surcharge on physician licenses* (option 13) to generate funds for primary care education[4] satisfies all financial and administrative criteria except one: the initiation of such a program would require an organization to collect and disburse these funds, which might be expensive and unwieldy. Physicians would strongly object to this tax, although other stakeholders would generally support it.

### Increase in Payment for Ambulatory Care

*Application of the resource-based relative value scale* (RBRVS) (option 14) will provide primary care programs with more clinical income relative to present payment schemes. It will be predictable, administratively feasible, and budget-neutral (as long as it does not coincide with an increased volume of service). In addition to its effect on funds available to primary care educators, the RBRVS may stimulate more interest among medical students and residents in primary care careers.

*Extending outpatient third-party coverage* to include more outpatient services (option 15), to increase the allowable charge payable in teaching settings, or to include more of the working poor would aid almost all GME programs. The development of high-quality primary care programs would not be particularly encouraged, however. Without offsetting decreases in funding for other services or populations, this solution is not neutral for the federal budget. Although it might be argued that increasing outpatient care, particularly preventive services, could save money because of lower inpatient costs, the evidence for this assertion is weak. Federal and state governments, as well as third-party payers, would probably oppose such a measure as a way of enhancing primary care GME, but other stakeholders would support it.

The option of *adding a Medicare direct teaching adjustment for ambulatory services* through Medicare Part B (option 16) would not be budget-neutral unless the remaining payments were recalculated, nor would it broaden the scope of contributors to GME. Developing cost estimates for the adjustment may be difficult. Such a payment, however, could aid primary care programs, particularly if criteria are established to define the circumstances in which physicians' bills may be supplemented by a direct teaching adjustment.

*Allowing residents to bill third-party payers* for outpatient care (option 17) would not benefit primary care residencies exclusively, nor would it be budget-neutral. If the billing costs were resource-based and if the costs of supervision were included in the charges, this billing would probably be higher than that of attending physicians, especially for more junior trainees. The government and third-party payers would be likely to oppose this option.

### Grant Support

Alternatively, *foundations* could be encouraged to support GME in primary care (option 18), perhaps through matching government-foundation grant programs. In this case, payers would not benefit directly, nor would all those who benefit from GME pay for it. The predictability of such grants could be increased by lengthening their time frame to a minimum of 5 or more years and by assuring a tapering period at both the initiation and termination of the grant. Grants could encourage quality in primary care education by targeting the funding to programs that agree to use the money for predetermined purposes (eg, faculty development, training site development, curricular innovation).

An *increase in Title VII funding and an increase in federal faculty development grants* for primary care (options 19 and 20) each fulfills the criteria well, with two significant negative effects. These options are not budget-neutral and do not extend the burden of GME payment to all who benefit, except by passing on the costs through taxation. The federal government would be the principal stakeholder expected to oppose the measures because of budgetary pressures.

The option of *increased VA support of primary care GME* (option 21) would be budget-neutral only if it were funded by a reallocation from other VA expenditures. Although this option would increase the scope of beneficiaries contributing to primary care GME, its focus would likely be narrow. VA funding of primary care education would principally aid internal medicine because few family medicine and pediatrics programs receive VA support.

An *increase in state grants* to primary care residencies (option 22) fulfills the administrative criteria because most states already have mechanisms in place for identifying and distributing such funds. As with all grants, the predictability of such funding could be aided by the assurance of funding for a specified length of time, such as a minimum of 5 years. Educational objectives can be met as long as the funds are aimed at primary care programs for quality-enhancing purposes (eg, funding of supervising physicians, curriculum development, development of new sites for training in underserved areas) and do not dictate curricula in ways that are idiosyncratic of the particular state legislature or administration. State taxpayers and legislatures would likely object to an increase in their contribution to GME, especially in states where primary care physicians are practicing in adequate numbers and are adequately distributed.

### Commitments from Future Employers and Redistribution of Funds

Funding primary care GME through *commitments from future employers,* such as HMOs, states, or the Public Health Service (eg, the National Health Service Corps) (options 23 to 25), in return for a commitment from physicians to work for a specified period, involves an increase in overall expenditures for GME, but payers would benefit directly, and more of those who benefit from GME would contribute to its costs. If this option requires a contract between the individual residents and future employers, however, the funding stream is not predictable for the training program. The administrative complexity of such a program would vary depending on whether the future employer had a mechanism already in place for coordinating such efforts, such as the National Health Services Corps or the military. Although such an option would increase the funding of primary care GME, it does not necessarily ensure an improvement in quality; however, future employers would have a stake in assuring high-quality and appropriate training to fulfill their organizations' needs. The stakeholders most likely to object strongly to this proposal are the primary care residents themselves, who may view it as an inequitable solution whereby primary care residents are singled out from other residents and forced to take on the financial burden of their program. Primary care educators may agree with the residents and also dislike the option because of its unpredictability in financing their programs.

*Redistributing money from Title VII* of the Public Health Service Act among all primary care residencies (option 26) to support a specific aspect of primary care education fulfills almost all of the criteria. For only one criterion would this option have a negative effect: it would not broaden the scope of payers. Not all of those who benefit from GME would pay a portion of the costs. Stakeholders would generally favor such a proposal, with the important and probably vigorous exception of those programs that now rely on Title VII for a significant portion of their funds. Because it is highly unlikely that a simple redistribution of Title VII funds would provide sufficient funding for primary care programs, regardless of how "sufficient" is defined, an increase in Title VII funding along with a redistribution to primary care programs could have a salutary effect on primary care education, with relatively less need for new funds than many other options.

The alternative of encouraging academic health centers to devise plans whereby *clinical income is redistributed* from more clinically lucrative medical and surgical specialties to primary care departments[5] (option 27) fulfills relatively few criteria. Administratively, it would be difficult for most hospitals to accomplish this task because nonprimary care physicians would strongly object. This option would help support primary care programs in large teaching hospitals, but not in smaller community hospitals with fewer physicians on a medical center practice plan. As a voluntary effort or as one instituted by medical center leadership on a local level, this option is to be encouraged.

## ANALYSIS OF SPENDING ALTERNATIVES

If additional funding is made available, this money can be spent in different ways. The distribution of funds will influence the acceptability and the impact of each option for identifying funds. When the spending options described here are analyzed by the criteria discussed, three clusters emerge.

The first theme involves *division of funds on a per-resident basis,* distributed directly to primary care programs. This option fulfills the criterion of being predictable and is administratively feasible. It also allows for curricular autonomy and encourages primary care growth and development. Although this increased funding for primary care does not ensure higher quality residencies, well-conceived guidelines for spending the money would help. The principal stakeholders who would object to these options would be nonprimary care educators, specialty organizations and residents. The strength of their objections would depend on whether the money to implement these objectives is taken from the stakeholders' present funding sources or from new ones.

The second option is less favorable when judged against these criteria. This approach involves *dividing the funds on the basis of competitive grants* for primary care programs to use as each program determines; or for faculty, residents, the ambulatory site, curriculum development, the academic unit, increased resident ambulatory time; or for cooperative efforts among primary care residencies. This option fails in predictability, although this weakness could be offset by setting the term of the grants at 5 years or more and by assuring a tapering period at the initiation and termination of the grant. Significant start-up costs would be needed, as would a new or expanded administration to review grants, make site visits, dispense funds, and follow up on their use. The ongoing costs of administration might also be significant. Although the quality of some programs would certainly improve, not all primary care programs would receive grants, and thus a greater discrepancy in quality than currently exists could develop. Depending on the source of funds, both primary care and nonprimary care educators, specialty organizations, and residents might object to these alternatives. A more limited program of competitive grants, however,

superimposed upon a program of basic payment for all programs, would be more popular and would likely stimulate improved training in primary care.

The third spending option, which involves providing *a system of incentives for primary care education* and corresponding disincentives for nonprimary care education, appears less feasible. Few criteria would be fulfilled, significant administrative requirements would occur, and a set of criteria would need development. In addition to educators, specialty organizations, and residents (in both primary care and nonprimary care), teaching hospital administrators could be expected to object to most of these alternatives as yet another set of regulations with which to comply and a potential loss of funds for their residencies.

## SUMMARY

The growth and development of graduate medical education in primary care have been hindered by current financing mechanisms. To rectify the situation, criteria by which policymakers may judge funding alternatives have been proposed. These criteria include the financial, administrative, and educational implications of the options. The views of interested stakeholders also need to be considered because many of the options would affect more than primary care educators and residents. No single option will be sufficient; instead, several solutions will be needed simultaneously. Judged against the criteria proposed here, the preferred options for raising money for primary care graduate medical education are as follows:

1. Implement the resource-based relative value scale for payment of physicians and improve coverage of outpatient services.
2. Include all the primary and ambulatory care time spent by residents in the calculation of resident FTEs for both Medicare direct and indirect medical education payments, add incentives for primary care training in direct payments, and recalibrate per-resident payments to maintain budget neutrality.
3. Increase state support through Medicaid participation in payment for GME and through grants for primary care education.
4. Require participation in payment for GME by other payers, including HMOs and private insurers, coupled with a surcharge or tax on revenues of nonteaching hospitals.
5. Increase and redistribute Title VII funding for faculty development, curriculum design, and other innovations. Encourage foundation support for similar purposes. Faculty development, in particular, should be allowed a separate funding stream.
6. Test out programs to commit residents to future employers, who in turn would support primary care GME.
7. Experiment with a direct medical education subsidy for outpatient payments to complement payment to hospitals to cover the costs of medical education. Consider an indirect adjustment to compensate for the higher cost of practice (eg, overhead, more severely ill patients) in teaching settings.

The best spending options involve division of funds on a per-resident basis to residencies in internal medicine, pediatrics, and family medicine for the development of primary care curricular elements through faculty support, resident support, ambulatory site costs, curricular support, academic unit costs, increased ambulatory time, and primary care cooperative efforts, or to be allocated as the individual residency chooses. This base funding would be coupled with competitive grant funding to stimulate innovation and faculty development. In addition, the appropriate and designated use of Medicare direct payments should be enforced by HCFA.

### References

1. Eisenberg JM: How can we pay for ambulatory graduate medical education? N Engl J Med 1989; 320:1525–1531
2. Eisenberg JM: Financing ambulatory care education in internal medicine. J Gen Intern Med 1990; 5:S70–S80
3. Petersdorf RG: A proposal for financing graduate medical education. N Engl J Med 1985; 312:1322–1324
4. Perkoff GT: Graduate medical education confronted. JAMA 1988; 259:402–404
5. Perkoff GT: Teaching clinical medicine in the ambulatory setting. N Engl J Med 1986; 314:27–31