AMERICAN ACADEMY OF PEDIATRICS

Committee on Pediatric Workforce

Financing Graduate Medical Education to Meet Pediatric Workforce Needs

ABSTRACT. This statement reviews the current system of funding for graduate medical education (GME) in the United States and evaluates the potential of alternative GME funding mechanisms, including a portable authorization system, to meet future pediatric workforce needs. It addresses key issues relating to the financing of GME: Medicare direct medical education (DME) and indirect medical education adjustment (IMEA) payments, an all-payer GME trust fund, and a market mechanism to distribute GME funds for both core pediatric and pediatric subspecialty education. In a concluding series of recommendations, the statement calls for changes to the current system of GME funding to ensure the production of a pediatrician workforce that will be able to meet the future needs of infants, children, adolescents, and young adults.

ABBREVIATIONS. GME, graduate medical education; DME, direct medical education; DRG, diagnosis-related groups; IMEA, indirect medical education adjustment; IMGs, international medical graduates.

INTRODUCTION

Graduate medical education (GME) financing has become a major issue for both Medicare reform and the physician workforce. Medicare is the only major explicit financier of GME and related activities in the United States, making payments of over $6 billion each year to teaching hospitals. These payments may have encouraged an increase in the number of residency positions in recent years. At the same time, policy makers are projecting a physician surplus in the near future, partially attributable to increasing numbers of residency positions created in the past 2 decades.[1–5] Although freestanding children's hospitals have not been recipients of significant Medicare subsidies for GME, Medicare still has a major role in financing pediatric residency training, and its policies on financing for GME significantly affect the pediatric workforce.

Before the enactment of Medicare, GME programs were primarily funded by the sponsoring teaching hospital through patient care revenues. With the passage of Medicare in 1965, teaching hospitals received pass-through from Part A for the costs of GME, including resident salaries, benefits, and overhead, which are now referred to as direct medical education (DME) payments. In 1965, Congress recognized that hospitals with educational activities enhanced the quality of care offered and that the cost of this education should be borne by society.[6]

With the implementation of the Medicare diagnosis-related groups (DRG) payment system in 1983, teaching hospitals were given an adjustment factor to their reimbursement rate that was based on their resident-to-bed ratio.[7] Congress described the purpose of the indirect medical education adjustment (IMEA) as follows:

> This adjustment is provided in light of doubts . . . about the ability of the DRG case classification system to account fully for factors such as severity of illness of patients requiring the specialized services and treatment programs provided by teaching institutions and the additional costs associated with the teaching of residents . . . The adjustment for indirect medical education costs is only a proxy to account for a number of factors that may legitimately increase costs in teaching hospitals (House Ways and Means Committee Report, No. 98-25, March 4, 1983, and Senate Finance Committee Report, No. 98-23, March 11, 1983).

In fiscal year 1997, Medicare DME payments were about $2.2 billion and IMEA payments were about $4.6 billion, resulting in an average total payment of approximately $76 000 per resident.[8]

There are several important consequences of Medicare's primary role in GME. First, Medicare subsidizes GME as part of the expense of caring for Medicare patients. Thus, freestanding children's hospitals received only about $374 per resident from Medicare in fiscal year 1997 because they care for very few Medicare patients. These hospitals must seek other sources of funding for their GME programs. However, many pediatric residents train in general hospitals that receive both DME and IMEA payments for these residents, thus Medicare's GME policies still have a major impact on pediatric residency education. Second, Medicare Part A reimburses hospital services. Medicare payment for associated GME costs, therefore, is based on hospital-based services provided by residents. These reimbursement policies are a major financial disincentive for resident education in nonhospital settings.[9] Finally, Medicare provides GME support to any hospital with an accredited residency program. This entitlement has created a tremendous financial incentive for hospitals to increase the number of residency positions to increase Medicare reimbursement rates and to benefit from the clinical services provided by the residents. Increasingly fewer resident positions have gone unfilled during the past decade because of the high demand for residency positions in the United States by international medical gradu-

The recommendations in this statement do not indicate an exclusive course of treatment or serve as a standard of medical care. Variations, taking into account individual circumstances, may be appropriate.

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ates (IMGs). Historically, Medicare's GME financing policies constituted an open-ended federal subsidy, although in 1997 Congress finally placed a limit on the number of residency positions that Medicare would fund at each hospital.[10]

Although Medicare is by far the largest explicit national funder of GME, there are other major sources of GME financing.[11] Medicaid provides about $2 billion each year for GME-related expenses; however, it is state-specific and not available in all states.[12] Training Grants in Primary Care Medicine and Dentistry, a provision of Title VII of the Public Health Service Act, provide the authority and funding for faculty development, academic administrative units, predoctoral training as well as intensive primary care training for residents in diverse ambulatory settings. Title VII provides about $17 million each year for residency education in general pediatrics, internal medicine, and family practice. The largest source of funding for GME *in all specialties*, however, continues to be cross-subsidies from patient care revenue from private payers; however, these funds are not specifically designated for GME.[13]

Leaders in managed care believe that services at teaching hospitals cost 5% to 10% more than those at nonteaching hospitals.[14] Patients therefore are being diverted away from teaching hospitals because of their higher costs.[15] Not only does this trend affect the financial health of teaching hospitals and their ability to continue to support residency programs, it also affects the nature and quality of education that residents receive.

Our country's system of GME financing, then, has a tremendous impact on the pediatric workforce and the education of future pediatricians.[16]

GME AS A SOCIETAL GOOD

Residency or GME has been accepted by our society as an essential part of maintaining a high-quality physician workforce.[17] After earning a medical degree, US physicians are required by law in every state to complete an additional 1 to 3 years of GME before receiving a license to practice medicine.[18] This demanding educational process is unique to the medical profession.

Resident physicians provide valuable medical services, frequently to disadvantaged populations and patients with complex illnesses, under the supervision of experienced physicians. Thus, GME benefits society by ensuring the sustained availability of highly skilled physicians and through direct provision of clinical services by resident physicians.

DECOUPLING IMEA

Congress has recognized the need to increase payment to tertiary care hospitals that care for more severely ill, complex patients because of the limitations of the DRG payment methodology.[19] Unfortunately, the ratio of residents to beds was used as a proxy for determining which hospitals cared for these patients. Thus, hospitals were given a financial incentive to increase the number of residency positions irrespective of whether they cared for more complex patients. By calculating IMEA on a basis other than the number of residents at a hospital, this financial incentive would be removed. The decoupling may lead to a drop in the number of residency positions sponsored by some hospitals, but it is widely perceived that currently an excess number of residency positions exist in this country.

Care for indigent patients, clinical research, and specialized services and technology for complex patients continue to be important regional and national resources that need financing. Alternative mechanisms should be developed to support the costs of these missions.

AN ALL-PAYER GME TRUST FUND

Although society in general and all payers, including Medicare, benefit from GME, Medicare cannot and should not continue to be the only payer to designate substantive funding specifically to support GME. The participation of all payers, both public and private, in financing GME should be encouraged, and a mechanism should be developed to ensure an equitable and openly acknowledged contribution from all parties. Medicare would be able to reduce its burden in financing GME if the private sector begins to pay its fair share.

An all-payer GME trust fund will create many benefits.[20] A national GME trust fund could eliminate distortions in the physician workforce caused by the current Medicare funding methodology and develop mechanisms for financing residency positions that will best meet the physician workforce needs of the United States. The total number of residency positions financed can be based on national workforce needs. Funding could be more flexible to support education in ambulatory and community sites for residents in primary care specialties. Also, GME support could be provided to all specialties, including pediatrics and pediatric subspecialties, based on demand.

Some concerns about a national all-payer GME trust fund include an increase in the cost of employment-based and directly purchased health insurance; these costs are currently being borne by Medicare and other payers who support GME. An all-payer trust fund would potentially reduce a teaching hospital's incentive to care for Medicare patients; however, it is very unlikely that a teaching hospital would be able to turn away Medicare patients given the dominant role of Medicare as a payer.

Allocation of funds also would be an issue. A centralized planning body that allocates GME funds to each hospital and/or specialty would likely become highly politicized and also may be insensitive to signals from the health care market, leading to an excessive number of physicians in certain specialties. Use of a market mechanism may be more flexible and responsive to actual societal requirements for physicians.

USING A MARKET MECHANISM TO DISTRIBUTE GME FUNDS

Using a market mechanism for distributing GME funds has many advantages.[21] Such a system would be responsive to market demand for physicians and

make residency programs and their sponsoring institutions more responsive to the educational needs of their residents.[22] This system also may improve accountability of GME expenditures.

A proposed market mechanism would be a portable authorization system that would allocate GME funds for direct medical education costs to accredited residency programs based on the selection of the program by qualified students or residents. Students would select programs based on their educational and career needs in response to the demands of the health care market. The funds would not be transferable between residents to prevent abuses. The total number of positions to be funded would be set by a public-private health care workforce policy body based on national workforce requirements. The Accreditation Council for Graduate Medical Education accreditation system would continue to set educational standards for residency programs.

Issues that need to be addressed include the mechanism for determining whether or not students and residents are qualified for funding, the amount of funding distributed for each position, and the number of years of training to be funded. Residency positions that are not selected by qualified students or residents and therefore not eligible for funding under the proposed market mechanism, could be financed independently by the sponsoring institution from its own revenues, grant funds, or other means. The amount of funding provided for each position should be similar for each institution recognizing there are regional variations in direct GME costs. These costs also should include support for appropriate residency education in nonhospital settings. Medicare IMEA funds should be uncoupled from the number of residents at a teaching hospital. IMEA funds that primarily support noneducational missions of teaching hospitals including indigent care, clinical research, and specialized services and treatment programs should be distributed through alternative mechanisms that provide stable funding for these important missions. There are concerns that a market mechanism will make it more difficult for residency programs to plan their GME needs from year to year as students and residents make different choices. Residency education involves substantial investments in facilities and personnel, and continuity of funding over time is important. However, this sensitivity to student and resident needs is important to meeting the demands of the physician workforce of the future.

The portable authorization system will not address geographic maldistribution of physicians. Thus, support for programs such as the National Health Service Corps and state-level scholarship, loan forgiveness, and incentive programs remain essential to address this problem.

FINANCING SUBSPECIALTY GME

Pediatric subspecialists have an essential role in improving pediatric care by generating new knowledge through clinical and basic science research, in educating other pediatric practitioners, and in providing specialized pediatric services. Because of concerns about the glut of subspecialty physicians, in some specialties GME support for subspecialty training has been cut, and some have advocated eliminating support altogether. However, not all subspecialties have an excess of physicians, and there is probably a need for more physicians in some pediatric subspecialties. Thus, stable and reasonable mechanisms of support for subspecialty GME are required.

CONCLUSION

GME benefits society through the education of highly skilled physicians and the delivery of clinical services by resident physicians. The current Medicare mechanisms of funding GME have created financial incentives that do not reflect physician workforce needs.[13] Also, independent children's hospitals receive minimal GME support through Medicare. All payers should support the direct cost of GME through a national GME trust fund, and a market mechanism should be used to distribute GME funds to the entities that incur the costs of residency education. Clinical subspecialty GME and the development of a clinical research workforce also will require some support from the GME trust fund.

The Academy acknowledges the careful evaluation of GME financing issues undertaken by the Future of Pediatric Education II Project. The Project was a 3-year initiative of the pediatric community charged with determining the education needed to develop and maintain the workforce that will provide optimal health care to infants, children, adolescents, and young adults in the 21st century. In their deliberations, the Project raised concerns about several aspects of a portable authorization system. Many of these concerns have been presented and addressed in this policy statement. The Project concluded that, overall, it would not endorse a portable authorization system.[23] The Academy believes, however, that alternative mechanisms for GME financing reform have not proven to be a practical solution, and therefore suggests that such a market mechanism is the most feasible approach to GME reform in the current climate.

EXISTING AMERICAN ACADEMY OF PEDIATRICS POLICY ON GME FINANCING AND WORKFORCE

GME funding policy is an appropriate mechanism to shape the physician workforce to meet national needs. The number of payer-funded residency positions should be related to national workforce requirements. Because all physicians in the United States must complete a period of GME before being licensed to practice, the number of positions should be sufficient to allow all MD and DO graduates of accredited US medical schools an opportunity to enroll in an accredited GME program.[24]

The number of entry level positions in the GME system should be aligned more closely with the number of graduates of accredited US medical schools.[1]

A national public-private workforce body should be established to monitor and assess the adequacy of the health professions workforce including the impact of GME funding policies on reaching national

physician workforce goals. The workforce body can advise on the number of residency positions that should be funded and the mechanism for qualifying additional recipients for funded positions.[25]

RECOMMENDATIONS

- Because all payers of health care services benefit from the availability of residency-trained physicians, all payers including Medicare should contribute equitably to a fund that supports the direct costs of GME including resident salaries and benefits, faculty teaching time, and overhead and patient care expenses directly related to residency education.
- GME funding must be paid to the entities that incur the costs of residency education including community sites.
- Freestanding children's hospitals have a unique and important role in residency education for physicians in all specialties that may care for children. Thus, education programs in freestanding children's hospitals should receive a level of support per resident equivalent to that of other teaching hospitals for their GME activities. Education programs in freestanding children's hospitals should be included in a reformed national GME financing system.
- GME funds must be directed toward GME and should not be included in capitation payments for clinical services.
- Distribution of Medicare IMEA funds should be uncoupled from the number of residents at a teaching hospital. IMEA funds that primarily support noneducational missions of teaching hospitals including indigent care, clinical research, and specialized services and treatment programs should be distributed through alternative mechanisms that provide stable funding for these important missions.
- GME reform is overdue. A portable authorization system for use by graduates of accredited US medical schools and other qualified recipients is a promising and potentially feasible mechanism to distribute funds to residency programs to finance the direct costs of GME. Alternative mechanisms for distributing GME funds do not appear to be as workable as a portable authorization system. Any mechanism for distributing GME funds should ensure that resident physicians are educated in specialties demanded by the physician workforce market and should also be sensitive to promoting the education needs of resident physicians to provide quality health care in the future.
- Pediatric subspecialty physicians play a critical role in the development and application of new knowledge in health care for children and the education of future pediatricians. Subspecialty GME should receive support from the GME financing system for clinical education. The National Institutes of Health and other federal agencies should fund research education by subspecialty residents. Additional work is needed to develop mechanisms to ensure adequate support to educate an appropriate supply of subspecialty physicians.
- Children in underserved communities served by pediatric residents may be affected by reductions in the number of residents and residency programs. Additional support to programs such as the National Health Services Corps and Community Health Centers is needed to supply health care professionals in medically underserved communities. These programs will allow continued provision of health care services for these communities without fueling physician oversupply.

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