Is the Teaching Health Center Graduate Medical Education Program a Model for GME Reform?

Barbara O. Wynn, MA

In this issue of the *Journal of Graduate Medical Education*, Regenstein et al[1] describe the financial reporting instrument developed for the Teaching Health Center Graduate Medical Education (THCGME) program as a model for transparent, accountable graduate medical education (GME) financing that could inform a fiscally accountable national GME financing system. Most federal funding for GME is through the Medicare program, which uses outdated cost data and analyses to determine Medicare's share of GME costs incurred by hospitals for residency training.[2] The authors suggest that the THCGME Costing Instrument could be used by other residency programs to estimate the current costs of residency training and ultimately might replace Medicare's formula-driven GME funding streams. Widespread systematic data collection that builds on the THCGME financial reporting instrument could inform issues regarding variation in ambulatory training costs across different specialties, training sites, and years of training. However, more fundamental GME reform is needed to bring greater accountability and transparency in the use of federal funds to meet future physician workforce needs.

The THCGME program is targeted toward nonhospital, community-based training sites for selected specialties (family medicine, internal medicine, pediatrics, obstetrics and gynecology, geriatrics, psychiatry, and dentistry) in rural and underserved areas. Early findings indicate that the program is meeting its intended objectives. Yet the THCGME program, which in 2015–2016 had 210 physicians and dentists completing training,[1] represents only a very small part of residency training and lacks stable funding that would make scalability feasible to meet the nation's projected physician workforce shortages in these specialties. Programs accredited by the Accreditation Council for Graduate Medical Education (ACGME) had 12 936 physicians who completed training in THCGME-targeted medical specialties.[3] Stabilizing the funding stream for the THCGME program is important, but increasing the output of generalist physicians by traditional residency training programs is more critical because they account for 98% of the potential pool of generalist physicians. Increasing the number of physicians in traditional programs who elect to become generalists by 5 percentage points will produce more generalists than doubling the THCGME program. Progress toward this objective could be made either through a fundamental structuring of GME federal funding, along the lines recommended in the Institute of Medicine's 2014 report,[2] or through updating the Medicare payment methodologies and incentivizing teaching hospitals (the current recipients of Medicare funding) to increase residency output in the targeted specialties. While fundamental reform is desirable from a policy perspective, revamping the Medicare payment methodologies may have greater feasibility.

The Medicare payment methodologies are shaped in a statutory framework that requires program funds to flow to hospitals and other medical providers for services provided to Medicare beneficiaries.[2] Unlike the Health Resources and Services Administration (HRSA) funding programs, Medicare GME funding is mandatory spending that does not require periodic appropriations. Given the current budgetary environment, it is likely that any financial incentives to promote generalist training will need to occur within current Medicare funding outlays and retain the concept of Medicare paying for its share of GME costs.

Medicare limits the total number of residency positions that it will fund at a particular teaching hospital to the number of full-time equivalent residents training at the institution in 1996.[2] Periodically, there have been reallocations of unused positions consistent with workforce needs. For example, the Affordable Care Act redistributed 599 unused positions for indirect medical education (IME) payments and 692 unused positions for direct graduate medical education (DGME) payments[4]; 70% of the positions were allocated to hospitals in states with resident-to-population ratios in the lowest quartile, and 30% were allocated to hospitals in rural or health professional shortage areas. A hospital receiving the slots cannot reduce its predistribution average number of primary care residents for at least 5 years and must allocate at least 75% of the redistributed slots for primary care or general surgery.

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Of note, Medicare defines primary care as residents in family medicine, internal medicine, pediatrics, preventive medicine, geriatric medicine, osteopathic general practice, and obstetrics and gynecology.

Despite the Medicare limits, the total number of ACGME-accredited residents has increased 27% in the 20 years since the limits were imposed.[3,5] Other than the restrictions on hospitals receiving redistributed residency slots, the Medicare limits are based on total residency counts without consideration of specialty. One unintended effect is that the limits may have encouraged expansion in subspecialty residency programs relative to primary care and other core specialty programs. Subspecialty programs are less likely to impose a cost burden to the hospital because of the higher value of the services provided by the residents to hospitals and teaching physicians. Since 1996, there has been an 87% increase in the number of subspecialty residents in ACGME-accredited programs, compared with a 23% increase in residents in general internal medicine, family medicine, general pediatrics, and combined internal medicine–pediatrics programs, and a 16% increase in residents in other specialties.[3,5]

Subject to the Medicare limits on the number of funded resident positions, payments are made to teaching hospitals for residents working in the teaching hospital and in community patient care settings if the hospital pays the residents' salaries and fringe benefits. Teaching hospitals receive DGME payments for educational costs such as resident stipends, teaching physician compensation, and office and other administrative expenses associated with the residency program. In addition, teaching hospitals receive IME payments that compensate for the higher patient care costs that are generally attributable to teaching, such as higher service intensity, greater use of new technology, unmeasured patient severity, and reduced productivity of hospital staff working with residents. Both DGME and IME payment levels are based on Medicare's share of empirically based but outdated cost estimates.[2] Medicare collects the data underlying its payment formula on an ongoing basis, but there has not been the political will to use the data to update and refine the program's GME payment policies.

The DGME payment methodology is based on Medicare's share of a hospital-specific per-resident amount (which for most hospitals is based on 1984 direct GME costs) updated for inflation using the Consumer Price Index.[2] The per-resident amount is approximately 6% higher for primary care residency programs than for other specialty programs and is reduced 50% for residents beyond their initial residency period. The outdated hospital-specific per-resident amounts do not reflect current financing arrangements and cost structures for GME programs. They also reward hospitals with higher costs in 1984 and penalize those that were relatively low cost. Additionally, the Consumer Price Index adjustment to the per-resident amounts has not kept pace with actual increases in per-resident costs. On average, the per-resident amount used to determine Medicare's DGME payments was 76% of actual fiscal year 2011 per-resident costs.[6] Using a national average per-resident amount in lieu of the hospital-specific amounts would provide greater funding equity across programs and promote efficiency within current DGME funding levels. Additional DGME funding would be required to close the gap between the national average per-resident amount and current costs per resident.

A potential source for this additional DGME funding may be through correction of IME funding. The current IME formula produces an adjustment that has been estimated to be more than twice the level indicated through a 2011 multivariate regression analysis as the teaching effect on Medicare costs per inpatient stay.[7] Based on an estimated $8 billion in Medicare IME spending in federal fiscal year 2013,[8] reducing the IME adjustment to its analytically justified level would make more than $5 billion available to support Medicare GME financing reforms targeted toward addressing workforce shortages. This would allow a substantial and sustained investment in meeting physician workforce shortages compared with the relatively minor investments included in the Affordable Care Act for HRSA's THCGME and Primary Care Expansion programs and the redistribution of unused Medicare-funded positions.

The funds freed by the reduction in the IME adjustment could be used to create incentives to increase resident output in shortage specialties and geographic areas. This could be done by lifting the cap on new residency positions in the targeted specialty and/or shortage areas and by increasing the per-resident amounts for these residency programs to estimates of current GME costs for them. Medicare routinely collects the prerequisite data to make these adjustments. However, reporting that builds on the THCGME Costing Instrument would be useful in gathering data pertaining to the costs of training in community settings relative to hospital settings, the differences in training costs across specialties, and the revenues generated by precepted visits. Together, these data could determine if differential per-resident amounts (beyond the 6% higher amounts for primary care residency programs and the 50% reduction for

residents beyond their initial residency period) would improve payment equity.

Any additional funding for GME should be consistent with national workforce goals and flow only to those hospitals whose teaching programs meet performance standards. The standards should consider not only the hospital's sustained level of effort in providing training in the shortage specialties and geographic areas but also whether residents completing the programs enter practices consistent with objectives for the incentive program. For example, the measures for primary care programs should consider not only the number and proportion of residents in the hospital's primary care residency programs but also the percentage of residents completing training who elect to provide generalist patient care, particularly to underserved and rural populations. Other measures might consider the proportion of time residents spend in community-based training sites. Here, again, the HRSA performance standards for THCGME could be useful.

While there are opportunities within the current Medicare framework to create incentives for increasing the production of physicians in workforce shortage areas, such an approach does not address the disparities in federal funding for GME activities created by relating a teaching hospital's payments to its Medicare share of patients and other shortcomings in the Medicare payment methodologies. Most Medicare funding would continue to flow to teaching hospitals based on their decisions regarding specialty offerings rather than as a reflection of strategic decisions regarding the nation's health workforce needs. More fundamental reforms, as envisioned in the Institute of Medicine report,[2] are needed to address shortcomings in the Medicare framework for GME funding and to increase overall accountability for meeting health workforce needs.

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Barbara O. Wynn, MA, is Adjunct Senior Health Policy Researcher, RAND Corporation.

Corresponding author: Barbara O. Wynn, MA, RAND Corporation, 1200 South Hayes Street, Arlington, VA 22202-5050, wynn@rand.org