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questions about GME persist following IOM report

Despite the 2014 release of an Institute of Medicine report on graduate medical education (GME), the healthcare industry requires much more guidance regarding the cost of GME, the sources of its funding, and its strategic intent.

In summer 2014, the Institute of Medicine issued a report presenting the recommendations of a 21-member committee that was convened to perform an independent review of the governance and financing of the nation's graduate medical education (GME) program. This program reimburses teaching hospitals, or academic medical centers (AMCs), for the costs they incur in training medical residents and fellows. A Regarding the need for such a review, the IOM notes on the web page where it has made the report available for download: B

Since the creation of the Medicare and Medicaid programs in 1965, the public has provided tens of billions of dollars to fund graduate medical education (GME), the period of residency and fellowship that is provided to physicians after they receive a medical degree. Although the scale of government support for physician training far exceeds that for any other profession, there is a striking absence of transparency and accountability in the GME financing system for producing the types of physicians that the nation needs.

In its report, the committee recommends changes to GME financing and governance that are designed "to address current deficiencies and better

a. Eden, J., Berwick, D., and Wilensky, G., *Graduate Medical Education That Meets the Nation's Health Needs*, Institute of Medicine, Washington D.C., The National Academic Press, 2014. (All page number citations are from this report.)

b. Go to iom.nationalacademies.org, and search for the keywords "Graduate Medical Education"

shape the physician workforce for the future." In addition, the report claims to provide "an initial roadmap for reforming the Medicare GME payment system and building an infrastructure that can drive more strategic investment in the nation's physician workforce."

Despite its recommendations and claims, the IOM report falls short of expectations. Its shortcomings are particularly evident in six areas where the committee either overlooked or failed to address some important issues:

- > Funding and cost
- > The joint cost dilemma
- > Economic value of residents
- > Specialty mix of residents
- > The "lighthouse effect"
- > The transformation fund

Funding and Cost

The report recommends that the current level of GME funding of \$15 billion a year (\$9.7 billion from Medicare, \$3.9 billion from Medicaid, and \$1.4 billion from other sources) be continued, and adjusted annually for inflation. It also recommends that the total be shifted from a combination of direct graduate medical education (DME) payments (about \$4.3 billion) and indirect medical education (IME) payments (about \$10.7 billion) to a split between an operational fund and a transformation fund. The report recommends that the transformation fund should focus on research, and should grow steadily for 10 years, until it becomes 30 percent of all payments (about \$4.5 billion in current dollars), that it remain at that level for four years, and then decline over two years to its original level. The operational fund would follow the reverse pattern, and would return to its original level in 2026 (p. 5-22).

In recommending this shift in payments, the IOM has missed a fundamental point: Nowhere has the report provided justification for the \$15 billion total. Indeed, it is all but impossible to justify this amount, because there have been virtually no studies of the actual cost of GME. As the report notes, "Reported data on the direct costs of GME

are not completely standardized, or audited" (p. S-5). The report also says, "The continuation and appropriate level of Medicare GME funding should be reassessed after the program reforms have in been place for some period of time. Ten years is an appropriate time frame to consider" (p. 5-13, emphasis added). But the report does not provide any justification for that time frame. Moreover, given the failure to justify the \$15 billion, 10 years is a long time to wait to assess the appropriateness of funding that may not have been appropriate at the outset.

One reason the direct cost of GME is difficult to compute is that GME appears as a support (or service) center (not a mission center) on a Medicare cost report. As such, the apparent cost of GME is only at the institutional level. The GME support center's costs include the AMC's GME office plus some allocated overhead (such as for institutional administration, plant maintenance, and housekeeping). But these costs exclude any GME costs incurred in individual mission centers, such as departments of medicine and surgery. Costs in these centers range from a portion of the salary of the department's (and sometimes a division's) program director to the cost of scrubs for the residents.

The costs in the GME support center are allocated to the individual mission centers, usually on the basis of the number of FTE residents in each mission center. At that point, unless a special study is done, the full cost of GME in each mission center is not known. GME costs, both direct and allocated, are included along with a mission center's other direct and allocated costs to compute its full cost.

In short, it is not possible to compare the \$4.3 billion in DME payments to the actual costs that AMCs incur in providing GME. By not addressing this comparison, the report has avoided discussing the question of whether \$4.3 billion is the appropriate amount.

The report's discussion of IME payments is similarly flawed. When initiated almost 50 years ago (about 20 years prior to the introduction of DRGs), these payments were designed to compensate AMCs for their more severely ill patients, as well as for the fact that residents tended to order more tests and procedures than did attending physicians. The report discusses this matter briefly (p. 3-30), but then concludes that IME payments are "aimed at helping to defray additional costs of providing patient care thought to be associated with sponsoring residency programs" (p. S-5, emphasis added). The report gives no specifics of what these additional costs are, nor could it, given that it does not provide an in-depth discussion of how to compute the actual cost of GME.

The report actually makes a strong case against IME payments, albeit subtly, by pointing out that DRG classifications are more sophisticated today than they were when initiated some 30 years ago, and therefore that an incremental payment to AMCs for severity is now difficult to justify. The report notes that today, with few exceptions, a patient with a serious illness will be classified into an appropriate DRG and a higher payment will be made, regardless of whether the patient is in a community hospital or an AMC. Moreover, as the report says, AMC faculties increasingly are attempting to teach residents about the appropriate ordering of tests and procedures, thereby mitigating the excesses.

Therefore, by following the report's logic, one could rather easily conclude that IME payments are no longer justified, meaning that \$10.7 billion of the \$15 billion in total GME payments have been obviated. But rather than recommending that this funding be eliminated due to its effective inclusion in DRG payment rates, the report suggests that the \$10.7 billion should remain and continue to be spent via the operational and transformation funds.

The Joint Cost Dilemma

In an effort to explain why the direct cost of GME is difficult to compute, the report alludes to what accountants call the "joint cost problem," stating that education, research, and patient care are

"inextricably intertwined." Therefore, according to the report, it is not possible to determine what portion of the cost of a visit to the bedside is associated with education as opposed to research and/or patient care.

What the report does not mention is that the joint cost problem was addressed conceptually by cost accountants decades ago. For example, cattle ranch cost accountants must determine how much of the cost of feeding the cow is in the steak and how much is in the leather belt. AMC cost accountants could use a similar methodology to determine how much of the cost of a visit to the bedside is associated with GME and how much is related to other activities.

An effort to address this issue was made about 12 years ago in a medium-sized AMC. c The results showed a difference of about 5 percent between the full cost of GME shown on the Medicare cost report and the full cost computed by using a more appropriate methodology (\$16.7 million versus \$17.6 million). There also were significant differences in the GME cost by department, ranging from increases of more than \$1 million in family practice and ob-gyn to decreases of more than \$4,00,000 in medicine and pediatrics.

The central point here is that the actual cost of GME could be computed more accurately than currently is the case. The methodology for distributing joint costs among different cost objects (education, teaching, and research in AMCs) is not perfect, nor will it ever be, but it can be used to obtain a more accurate representation of the cost of GME than we now have. The failure to mention that such a methodology exists, and that it has been used in previous research to estimate the cost of GME, is a significant omission in the IOM report.

Economic Value of Residents

As with the cost of GME, there are no good data on the economic value of a resident. The report addresses this issue somewhat indirectly,

c. Young, D.W. "GME: At What Cost?" hfm, November 2003.

however, stating that the number of U.S. residency positions increased by 17.5 percent (17,000 slots) between 1997 and 2012 despite a cap on the number of Medicare-funded slots (p. 3-32).

The report points out that these increases suggest the possibility that at least *some* AMCs view residents as cost-effective care providers even when there is no DME payment to help cover their salaries. Thus, at least one logical conclusion emerging from these data is that some AMCs might continue to train residents even if DME payments were discontinued. That is, if the number of residency slots increased without GME funding, it is at least *plausible* that there would be no (or a minimal) decrease in these slots if DME funding were eliminated. The report does not mention this possibility. In short, it is conceivable that, as with funding for IME, funding for DME—at least as now structured—no longer is needed.

Specialty Mix of Residents

The specialty mix among residents is a related issue—one that the report identifies by stating "Medicare GME funding is not linked in any way with local, regional, or national health care workforce priorities." (p. 2-9). The report also states, "Forecasts of the future physician supply are variable and contradictory in part because it is difficult to anticipate future directions in the health care system." (p. 2-2)

There seems little doubt, however, that the next 10 to 15 years will see a growing incidence of chronic conditions among the nation's elderly. It also seems clear that the number of physicians who specialize in areas such as endocrinology, neurology, rheumatology, and geriatrics will fall far short of meeting the need. Nonetheless, the report concludes that "There is no mechanism for tying payments to the workforce needs of the health care delivery system." (p. S-7)

The report overlooks some possible approaches to addressing this issue: It should not be difficult, for example, to include incentives such as forgiveness of medical school debt for a resident or fellow specializing in, say, geriatrics, or committing to some specified number of years of service in an underserved area. This approach has been used in the past and could be continued with greater emphasis in the future. Doing so might require shifting DME payments away from AMCs and toward debt repayment, for example, or focusing the payments on high-priority specialties only.

At the other end of the spectrum, there is the question of why Medicare and Medicaid should subsidize the education of a physician who shortly after completing a residency program will have an income in the mid-six figures. The report suggests that GME payments can influence the development of the needed physician workforce, but nowhere in the report is there a recommendation to eliminate support for residents in, say, cardiovascular surgery, neurosurgery, or gastroenterology, and to provide significantly greater support for residents in primary care.

In short, if DME payments are to remain, they could rather easily be linked to local, regional, and national healthcare workforce priorities. It is not hard to determine what those priorities are, and it would not be too difficult to link DME payments to them.

The "Lighthouse Effect"

Why should insurers other than Medicare and Medicaid help to pay for GME when they would receive the benefit of trained physicians anyway? That question is like asking why a ship should pay for the cost of a lighthouse when the light is there for all to use, regardless of who pays. Furthermore, saying, as the IOM report does, that private payers' contribution to GME is "implicit in patient care payments" (p. S-6) is to dismiss the free-rider issue too easily.

The simple solution to this problem parallels the solution to the lighthouse situation, where ship owners as a class pay for the cost of lighthouses.^d In the case of health care, the logical solution is a

d. Coase, R.E., "The Lighthouse in Economics," Journal of Law and Economics, Oct. 17,1974

premium tax levied on all insurers. If Medicare and Medicaid account for, say, 60 percent of all healthcare payments, and assuming that \$15 billion for GME is the right number, then Medicare and Medicaid should be paying only about \$9 billion of the total. The remaining \$6 billion should be paid by other insurers. The tax resulting from this approach would be only a small fraction of every premium dollar, and could be easily administered. The report does not raise this possibility among its recommendations.

The Transformation Fund

As mentioned previously, the IOM report recommends that the current split between DME and IME be reconfigured into a split between an operational fund and a transformation fund. Questions of whether the operational fund makes sense, and how much of it should be paid by Medicare and Medicaid, have been addressed above. The transformation fund is a separate matter.

The report does not provide an argument for why Medicare and Medicaid (or other insurers) should pay into such a fund. Funding for research on improving the healthcare system is available from a variety of sources, such the National Institutes of Health and many foundations. There may be good reasons for GME funding to provide this support, but doing so constitutes a major shift in strategy, and the report did not provide any of the underlying analysis and rationale that typically accompany such a shift.

Next Steps

The IOM report has not made the case for why \$15 billion in funding for GME is the right amount, or, indeed, for why there should be any external funding for GME at all. It has not provided any useful insights into how the actual cost of GME might be computed, including how to address the joint-cost problem. It has not made any recommendations regarding how GME funding incentives could be used to address the shortage

of physicians who focus on the needs of the chronically ill. It has not provided a rationale for the strategic shift from supporting education to supporting both education and research. And, if GME is to be paid for at all, it has not addressed the question of why Medicare and Medicaid should be the only entities that pay for it.

In light of these deficiencies, it seems appropriate to revisit the strategic and financial issues facing GME. However, it may be that the Centers for Medicare and Medicaid Services (CMS), and not the IOM, is the appropriate entity to undertake this effort. The objectives should include:

- > Additional research to determine the cost of training a resident or fellow in each specialty
- > A determination of whether DRG payment rates are now sufficiently robust to allow for elimination of IME payments
- > A study to determine healthcare workforce priorities over the next 10 to 15 years
- > An analysis of how to best focus DME payments to address these priorities
- > An assessment of what portion of GME financing should come from payers other than Medicare and Medicaid

Until these sorts of analyses take place, there is a strong case to be made for eliminating all GME payments. The need for IME payments has been obviated by more sophisticated DRG classifications, and there is evidence to suggest that many AMCs would continue to train residents even if there were no DME payments to support the effort.

About the author



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