

Missing Elements in the Institute of Medicine Report on Graduate Medical Education



The Institute of Medicine (IOM) report on graduate medical education has failed to answer (or even address in some instances) some of the most important questions that the US healthcare system faces concerning graduate medical education. Specifically, the report has not: 1) made the case for why \$15 billion is the right amount of funding, or even why there should be any public support for graduate medical education at all; 2) discussed how the actual cost of graduate medical education might be computed; 3) assessed how graduate medical education's "joint cost problem" might be solved; 4) addressed how the shortage of primary care physicians (especially those who deal with the needs of the elderly) can be reversed via graduate medical education funding incentives; 5) provided a rationale for its proposed strategic shift from supporting education to supporting both education and research; and 6) argued why Medicare and Medicaid should be the only entities that pay for graduate medical education.

In July 2014, the IOM issued its report on graduate medical education.¹ The report addressed a variety of concerns about the objectives, costs, and benefits of graduate medical education. It proposed rethinking the logic behind the \$15 billion spent annually to support residency training for physicians, most of which is provided by Medicare and Medicaid. It concluded that federal support for graduate medical education should continue, and that graduate medical education should be considered as an entitlement program. It also recommended that the way graduate medical education is paid should be restructured, and that the restructuring should include a transformation fund that would support research on ways to improve graduate medical education.

Unfortunately, the IOM report missed an important opportunity to propose reforms to the way graduate medical education is financed and structured. The report fell short in 6 areas.

1. FUNDING AND COST

The report recommended that the current level of graduate medical education funding of \$15 billion per 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 recommended that the total be shifted from a combination of direct graduate medical education payments (~\$4.3 billion) and indirect medical education payments (~\$10.7 billion) to a split between an operational fund and a transformation fund. The report recommended that the transformation fund grow steadily for 10 years, until it becomes 30% of all payments (~\$4.5 billion in current dollars), that it remain at that level for 4 years, and then decline over 2 years to its original level. The operational fund would follow the reverse pattern and return to its original level in 2026.^[1(p5-22)]

Shifting from a combination of direct graduate medical education and indirect medical education payments to operational and transformation fund payments has missed a fundamental point. Specifically, 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 graduate medical education. As the report says "Reported data on the direct costs of graduate medical education are not completely standardized, or audited."^[1(p5-5)] The report also says "The continuation and *appropriate* level of Medicare graduate medical education funding should be reassessed after the program reforms have been in place for some period of time. Ten years is an *appropriate* time frame to consider."^[1(p5-13, emphasis added)] But the report does not provide any justification for the appropriateness of the amount or the time frame.

One reason the direct cost of graduate medical education is difficult to compute is that graduate medical education appears as a support (or service) center (not a mission center) on a Medicare cost report. As such, the *apparent* cost of graduate medical education is only at the institutional level. The graduate medical education support center's costs include the academic medical center's graduate medical education office plus some allocated overhead (eg, for institutional administration, plant maintenance, and house-keeping). But these costs exclude any of the graduate medical education costs incurred in individual mission

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

In short, under the current approach, it is not possible to compare the \$4.3 billion in direct graduate medical education payments with the actual costs that academic medical centers incur in providing graduate medical education. By not addressing this comparison, the report has avoided discussing the question of whether \$4.3 million is the appropriate amount.

The report's discussion of indirect medical education payments is similarly flawed. When initiated approximately 50 years ago (~20 years before the introduction of diagnosis-related groups), these payments were designed to compensate academic medical centers for their more severely ill patients, as well as for the fact that residents tended to order more tests and procedures than attending physicians. The report discussed this matter briefly,^[1(p3-30)] but then concluded that indirect medical education payments were “. . . aimed at helping to defray additional costs of providing patient care *thought to be associated* with sponsoring residency programs.”^[1(pS-5, emphasis added)] The report gave no specifics of what these additional costs are, nor could it, given that it did not discuss the computation of the actual cost of graduate medical education in any serious way.

The report actually made a strong case *against* indirect medical education payments, albeit subtly, by pointing out that diagnosis-related group classifications are more sophisticated today than they were when initiated some 30 years ago, and therefore that incremental payments to academic medical centers for severity are now difficult to justify. Today, with few exceptions, a patient with a serious illness will be classified into an appropriate diagnosis-related group and a higher payment will be made, regardless of whether the patient is in a community hospital or an academic medical center. Moreover, academic medical center faculty increasingly are attempting to teach residents about the appropriate ordering of tests and procedures, thereby mitigating the previous excesses.

Therefore, by following the report's logic, one could rather easily conclude that there no longer is a justification for *any* indirect medical education payments. This would mean that \$10.7 billion of the \$15 billion in total graduate medical education payments have been obviated. But, instead of recommending that the \$10.7 billion be eliminated because of their effective inclusion in diagnosis-

related group payment rates, the report suggested that they should remain and continue to be spent by means of the operational and transformation funds.

2. THE JOINT COST DILEMMA

In an effort to explain why the direct cost of graduate medical education is difficult to compute, the report alluded 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 and what portion is associated with research and patient care.

What the report did not mention is that the joint cost problem had been addressed conceptually by cost accountants decades ago. For example, cattle ranch cost accountants must determine how much of the cost of feeding a cow is in the steak and how much is in the leather belt. Academic medical center cost accountants could use a similar methodology to determine how much of the cost of a visit to the bedside is related to graduate medical education and how much is related to other activities.

An effort to address this issue was made approximately 12 years ago in a medium-sized academic medical center.² The results showed a difference of approximately 5% between the full cost of graduate medical education shown on the Medicare cost report and the full cost computed by using a more appropriate methodology (\$16.7 vs \$17.6 million). There also were significant differences in the graduate medical education cost by department, ranging from increases of more than \$1 million in Family Practice and Obstetrics-Gynecology to decreases of more than \$400,000 in Medicine and Pediatrics.

The central point is that the actual cost of graduate medical education could be computed more accurately than currently is the case. The methodology for distributing joint costs among different cost objects (clinical care, teaching, and research) is not perfect, nor will it ever be, but it can be used to help obtain a more accurate representation of the cost of graduate medical education than we now have. Nowhere did the report mention that such a methodology was available or that it had been used in previous research to estimate the cost of graduate medical education.

3. ECONOMIC VALUE OF RESIDENTS

As with the cost of graduate medical education, there are no good data on the economic value of a resident. The report did address this issue somewhat indirectly, however, stating that the number of US residency positions increased by 17.5% (17,000 slots) between 1997 and 2012 despite a cap on the number of Medicare-funded slots.^[1(p3-32)] It pointed out that these increases suggest the possibility that at least *some* academic medical centers view residents as cost-effective care providers even when there are no direct graduate medical education payments to help cover their

salaries. This, if anything, is an argument to reduce or eliminate direct graduate medical education payments. Moreover, at least one logical conclusion emerging from these data is that some academic medical centers might continue to train residents even if direct graduate medical education payments were discontinued. If the number of residency slots increased without graduate medical education funding, it is at least plausible that there would be no (or a minimal) decrease in these slots if direct graduate medical education funding were eliminated. The report did not mention this possibility.

4. SPECIALTY MIX OF RESIDENTS

The specialty mix among residents is a related issue and one that the report identified by stating “Medicare graduate medical education funding is not linked in any way with local, regional, or national health care workforce priorities.”^[1(p2-9)] The report also stated “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.”^[1(p2-2)]

However, there seems little doubt that the next 10 to 14 years will see a growing incidence of chronic conditions among the nation’s elderly. It also seems clear that the number of primary care physicians—especially those who specialize in endocrinology, neurology, rheumatology, and geriatrics—will fall far short of meeting the need. Yet, the report concluded that “There is no mechanism for tying payments to the workforce needs of the health care delivery system.”^[1(p5-7)]

It should not be difficult to include incentives such as forgiveness of medical school debt in exchange for a resident specializing in, for example, geriatrics or committing to some specified number of years of service in an underserved area. This has been done in the past and could be continued with greater emphasis into the future.

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 earn a mid-6-figure income. The report suggested that graduate medical education 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, for example, cardiovascular surgery, neurosurgery, or gastroenterology, and to provide significantly greater support for residents in primary care.

5. THE FREE-RIDER ISSUE

Why should insurers other than Medicare and Medicaid help to pay for graduate medical education when they will receive the benefits of trained physicians anyway? Saying that private payers’ contribution to graduate medical education is “implicit in patient care payments”^[1(p5-6)] is to dismiss the issue of free riders too easily.

The solution to this problem parallels the solution to the classic “lighthouse problem,” namely, why should a ship pay for the cost of a lighthouse when the light is there for all to consume regardless of payment? The solution is that ship owners *as a class* pay for the cost of lighthouses.³ In the case of health care, the parallel solution is a premium tax levied on all insurers. If Medicare and Medicaid account for, say, 60% of all healthcare payments, and assuming that \$15 billion for graduate medical education is the right number, then Medicare and Medicaid should be paying only approximately \$9 billion of the total. The remaining \$6 billion should be paid by other insurers. This would translate into a tax that is only a fraction of a penny of every premium dollar and could be easily administered. The report did not raise this possibility.

6. THE TRANSFORMATION FUND

As indicated earlier, the IOM report recommended that the current split between direct graduate medical education and indirect medical education be reconfigured into a split between payments via an operational fund and a transformation fund, although not on a one-to-one basis. Questions of whether the operational fund makes any sense, and how much of it should be paid by Medicare and Medicaid, have been addressed earlier. The “transformation fund” is a separate matter. The report did not provide an argument for why Medicare and Medicaid (or other insurers) should pay into such a fund. Financial support 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 graduate medical education 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 a strategic shift such as this.

The IOM report has not made the case for why \$15 billion for graduate medical education is the right amount or, indeed, why there should be any external funding for graduate medical education at all. It has failed to provide any useful thinking on how the actual cost of graduate medical education might be computed, including how to address the joint cost problem. It has not made any recommendations related to how the shortage of primary care physicians who focus on the needs of the elderly can be addressed via graduate medical education funding incentives. It has not provided a rationale for the strategic shift from supporting education to supporting *both* education and research. And, if graduate medical education is to be paid for at all, it has not made the case for why Medicare and Medicaid should be the only entities that pay for it. In summary, the report has failed to answer (or even address in some instances) some of the most important questions that the US healthcare system faces concerning graduate medical education.

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