

**DETANGLING GRADUATE MEDICAL EDUCATION
FINANCING FROM
HOSPITAL PAYMENT METHODOLOGIES**

Lawrence Massa & Matthew Anderson**

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I. INTRODUCTION

Teaching hospitals face unprecedented challenges that necessitate changes to how America finances the residency requirements of physicians' education and training. Predicted physician shortages,¹ new health care

* Lawrence J. Massa, MS, FACHE, is President and CEO of the Minnesota Hospital Association. His 25-year career as a leader in health care includes serving as the CEO of Rice Memorial Hospital in Willmar, Minnesota for almost 15 years, and as South Dakota's Secretary of Health under Governor William J. Janklow. Massa earned a bachelor's degree from the University of South Dakota and a Master's of Science in Business Administrative services from Iowa State University. The views and opinions expressed in this article are those of the individual authors and not of their employer or any other organization with which each is affiliated.

* Matthew L. Anderson, J.D., is Senior Vice President of policy and strategy for the Minnesota Hospital Association. Before joining the Association in 2006, he served as an attorney for Minnesota State Colleges and Universities, the Hennepin County Attorney's Office and the Minnesota Attorney General's Office. He is a graduate of St. John's University and the University of Minnesota Law School. The views and opinions expressed in this article are those of the individual authors and not of their employer or any other organization with which each is affiliated.

¹ See *Graduate Medical Education: Training Tomorrow's Physician Workforce*, AMERICAN ASSOCIATION OF MEDICAL COLLEGES (AAMC), <https://www.aamc.org/download/386374/data/07252014.pdf> (predicting the nation will be short 130,600 physicians by 2025).

payment reforms,² and demands for greater price transparency³ all highlight the need for revisions to current graduate medical education financing structures.

For years, hospitals have delivered hands-on training experiences for physicians and an array of other caregivers during their journey from students to fully licensed practitioners.⁴ Teaching hospitals incur substantial costs to provide these residency or clinical experiences and have relied on a complex and fragmented financing structure to balance those costs.⁵ This multi-faceted, indirect and complex cost recovery system worked marginally well while teaching hospitals were paid predominantly on a fee-for-service basis for the patient care they provided, and when individual customers had little incentive to compare providers based on costs. Those conditions, however, are eroding quickly.

After summarizing existing financing systems underlying physician residency programs, this article explains the mounting pressures that jeopardize the sustainability of physician residency programs as payment reforms and price transparency initiatives move forward. To ensure ongoing, high quality physician training programs, we propose employing new mechanisms for ensuring that teaching hospitals can be competitive under new payment reforms without diminishing their commitment to medical education.

II. BACKGROUND

How society finances graduate medical education, especially for physicians, is a rising public policy concern as multiple and sometimes conflicting demands collide in the arena of public debate. It is important to recognize a few underlying realities of educating and training physicians that confine the options available to solve the policy challenges which are discussed later in this article.

First, before entering the health care workforce as fully licensed practitioners, physicians need practical, hands-on, and supervised training, commonly referred to as a residency.⁶

² See, e.g., *Fact Sheets: Better Care. Smarter Spending. Healthier People: Paying Providers for Value, Not Volume*, CRS FOR MEDICARE AND MEDICAID SERVS. (Jan. 26, 2015), <http://www.cms.gov/Newsroom/MediaReleaseDatabase/Fact-sheets/2015-Fact-sheets-items/2015-01-26-3.html>.

³ See, e.g., Russ Mitchell, *Employers, Unions Jointly Demand Health Care Price Transparency*, KAISER HEALTH NEWS (Nov. 1, 2012), <http://kaiserhealthnews.org/news/employers-unions-jointly-demand-health-care-price-transparency/>.

⁴ See *Graduate Medical Education*, *supra* note 1.

⁵ See *id.* (estimating teaching hospitals' direct costs of medical education programs to be \$16.2 billion each year).

⁶ See Catherine Dower, *Health Policy Brief: Graduate Medical Education*, HEALTH AFFAIRS 1 (Aug. 16, 2012), http://healthaffairs.org/healthpolicybriefs/brief_pdfs/healthpolicybrief_73.pdf. After medical school, physicians complete their training as

Second, while a physician completes his/her residency, the teaching institution, which is most typically a hospital, incurs direct and indirect expenses and inefficiencies.⁷

Third, during their residency and hands-on training, physicians perform services for patients and, in so doing, constitute a “key part of the labor supply at these hospitals.”⁸ However, “[t]hese residents do not, overall, generate revenue” for a teaching hospital.

Given these underlying realities, the net result is that teaching hospitals bear financial costs that other “non-teaching” hospitals do not shoulder. The policy issue at hand, therefore, is how society should finance those additional costs incurred by teaching hospitals in order to maintain their residency programs.

The current approach commonly used by Medicare and some states’ Medicaid programs—often teaching hospitals’ two most significant and influential payers—is an attempt to upwardly adjust their traditional fee-for-service payment amounts for services provided to their enrollees to recognize and partially mitigate these hospitals’ education and training costs. These public payers make supplemental payments up to and above the standard rates for hospital services when those services are delivered to a Medicare or Medicaid beneficiary by a teaching hospital.

In other words, if a non-teaching hospital’s Medicare payment for a particular service was \$X, then a teaching hospital’s Medicare payment for the same service would be \$X + (supplemental payment \$Y). Thus, two hospitals in the same community may receive different payment amounts from the same public program for the same service if one hospital is a teaching hospital and the other is not.

In an attempt to recognize two different categories of costs teaching hospitals incur, Medicare makes two different supplemental payments to teaching hospitals.

A teaching hospital’s direct costs, such as spending on physician faculty members’ and residents’ salaries and benefits, a portion of a teaching hospital’s overhead, and the administrative staff needed to manage the programs, are referred to as direct graduate medical education (direct GME or DGME).⁹ Congress enacted a GME supplemental payment in an attempt to recognize and pay for some of these costs in amendments to the Social Security Act through the Consolidated Omnibus Budget Reconciliation Act (COBRA) of 1985.¹⁰ This statute, along with its corresponding regulations,¹¹

residents. This training usually occurs in hospitals over the course of four years, or longer for highly specialized fields. *Id.*

⁷ See, e.g., THE LEWIN GROUP, *An Assessment of Hospital Medicaid and Medicare Payments in Minnesota*, at slides 15–16, 18 (Mar. 2004).

⁸ *Id.*

⁹ See *What does Medicare have to do with Graduate Medical Education?*, ASSOCIATION OF AMERICAN MEDICAL COLLEGES 1, <https://www.aamc.org/download/253380/data/medicare-gme.pdf>.

¹⁰ See Pub. L. 99-272 § 9202 (1985) amended by 42 U.S.C. § 1395ww (2015).

establish a complex methodology for determining each teaching hospital's base period per-resident cost amount (PRA) by dividing the hospital's allowable operating costs in its base year by the number of residents in training at the hospital during that base year.¹² For most hospitals, federal fiscal year 1984 serves as their base year.¹³

Medicare uses this PRA ratio from the base year and multiplies it with the number of full-time-equivalent residencies provided by a teaching hospital in a given year, and then applies that amount to Medicare's proportional number of inpatients served by the hospital.¹⁴ The formula used by Medicare takes into account several variables including but not limited to the unique needs of psychiatric hospitals.¹⁵

The GME program and methodology for calculating supplemental payments to teaching hospitals are not designed or intended to cover all of those hospital's expenses resulting from training and educating physicians. According to the Association of American Medical Colleges (AAMC), the average direct graduate medical education costs incurred by a teaching hospital for training a single physician resident amount to approximately \$100,000 per year.¹⁶ Medicare's direct graduate medical education supplemental payments for the average teaching hospital, however, account for only \$25,000 of the hospital's estimated \$100,000 of costs.¹⁷

Since enactment of COBRA, the GME program has been impacted by other major pieces of federal legislation. Most significantly, the Medicare Modernization Act of 1996 imposed a cap on the number of physician residencies teaching hospitals could count when calculating the amount of GME supplemental payments Medicare pays.¹⁸ Consequently, many teaching hospitals that train more physicians than the number allowed to be counted for determining GME payments have artificial limits on the amount of supplemental funding from Medicare to support their education and training programs. These caps remain in place and unchanged since 1996.

¹¹ 42 C.F.R. § 413.75–83 (2015).

¹² See *Direct Graduate Medical Education (DGME)*, CTRS. FOR MEDICARE AND MEDICAID SERVS., <http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/dgme.html>.

¹³ *Id.*

¹⁴ See generally Patient Protection and Affordable Care Act, 42 U.S.C. § 1395ww (2015).

¹⁵ See *id.* § 1395ww(a)(2)(B).

¹⁶ *Id.* See also Joanne Conroy, *The Graduate Medical Education Debate*, HEALTHAFFAIRS BLOG (Feb. 22, 2012, 4:11 PM), <http://healthaffairs.org/blog/2012/02/22/the-graduate-medical-education-debate/> (estimating training cost per physician at \$75,000 to \$100,000).

¹⁷ See Colin P. West, *Quality of Life, Burnout, Educational Debt, and Medical Knowledge among Internal Medicine Residents*, 306 J. AM. MED. ASS. 9 952, 952 (2011); see also Joanne Conroy, *The Graduate Medical Education Debate*, HEALTH AFFAIRS BLOG (Feb. 22, 2012), <http://healthaffairs.org/blog/2012/02/22/the-graduate-medical-education-debate/> (estimating training cost per physician at \$75,000 to \$100,000).

¹⁸ See 42 U.S.C. § 1395ww(4)(B)(vi)(I).

Although the total number of GME-supported residencies remains unchanged, the Affordable Care Act authorized Medicare to reallocate some of the residencies. If a hospital had not used all of its available GME-supported residencies slots for the past three years, Medicare could reallocate 65% of those slots to other hospitals.¹⁹ As a result, 726 GME-supported residency slots were shifted from 267 hospitals to 58 other hospitals.

The Affordable Care Act also authorized Medicare to redistribute GME-supported residency slots from any hospital that closed, including slots from hospitals that closed on or after March 23, 2008.²⁰

The teaching hospitals eligible to receive additional residency slots through this redistribution had to be located in a state in the lowest quartile of states based on the number of residents-to-population, or in rural or health professional shortage areas, and no single teaching hospital could receive more than 75 reallocated residencies.²¹

In addition to direct GME costs, teaching hospitals shoulder indirect costs that accompany hosting a physician residency program (indirect GME or IME) costs.²² Because teaching hospitals need to recruit and retain the faculty, facilities and expertise necessary to train tomorrow's workforce, they attract patients with more acute and complex conditions, offer a wider array of medical services and typically engage in research related activities.²³ As a result, teaching hospitals' operational costs are higher than those incurred by similar organizations without teaching programs.²⁴

Attempts to document and measure these indirect costs, however, have not produced consensus regarding the financial consequences of IME. According to one study, a teaching hospital's average cost per Medicare patient was as much as 28% higher than a nonteaching hospital's.²⁵ Another study estimated that IME costs could cause a teaching hospital's costs to be

¹⁹ *Id.* § 1395ww.

²⁰ *Id.* § 1395ww(h)(4)(H).

²¹ As calculated by Medicare, only hospitals in the following states could meet these eligibility criteria: Alabama, Alaska, Arizona, District of Columbia, Florida, Georgia, Idaho, Indiana, Louisiana, Mississippi, Montana, Nevada, New Mexico, North Dakota, Puerto Rico, South Dakota, Wyoming. *See, Redistribution of Graduate Medicare Slots*, AM. COLL. OF PHYSICIANS (2013), http://www.acponline.org/advocacy/where_we_stand/assets/iii4-redistribution-graduate-medica-education-slots.pdf.

²² Despite the language centered on "medical education," IME payments are more directly related to case and service mix costs that are associated with medical education programs than to the expenses of the actual medical education activities. *See Report to the Congress: Aligning Incentives in Medicare*, MEDICARE PAYMENT ADVISORY COMM'N (June 2010), http://www.medpac.gov/documents/reports/Jun10_EntireReport.pdf?sfvrsn=0. *See also* Catherine Dower, *Health Policy Brief: Graduate Medical Education*, HEALTH AFFAIRS BLOG (Aug. 16, 2012), http://www.healthaffairs.org/healthpolicybriefs/brief.php?brief_id=73 (hereinafter MPAC Report).

²³ *Id.*

²⁴ *Id.*

²⁵ *See* Lane Koenig, et al., *Estimating the Mission-Related Costs of Teaching Hospitals*, 22 HEALTH AFF., 6 112, 113 (2003).

almost 40% higher than a general hospital.²⁶ While the Medicare Payment Advisory Commission (MedPAC) has dismissed such estimates as significantly inflated and distorted.²⁷

Despite the lack of consensus on the amount of IME expenses teaching hospitals carry, there is agreement that hospital operational costs are higher if the hospital offers physician residency training. To offset a portion of these indirect and nebulous costs, Congress amended the Social Security Act to authorize Medicare to make IME supplemental payments on top of the standard reimbursement rates for services teaching hospitals provide to Medicare beneficiaries.²⁸ Only teaching hospitals that are eligible to receive GME payments are eligible to receive IME payments.²⁹ These IME payments cover an estimated 2.7% of hospitals' indirect medical education costs.³⁰

As with GME, the methodology for calculating a teaching hospital's IME payment is complex.³¹ Instead of using a hospital's cost-to-resident ratio, as in the case of GME, IME payments begin with a calculation of the teaching hospital's number of physician residents compared to the number of its inpatient beds. This ratio is then multiplied by a factor set by Congress.³² In short, a teaching hospital's IME payments reflect the number of residents it trains relative to the size of its inpatient hospital operations.

Congress has changed the IME payment factor many times over the years.³³ Although Medicare's GME and IME supplemental payments do not

²⁶ See A. Dobson, et al., *Financial Performance of Academic Health Center Hospitals, 1994-2000*, THE COMMONWEALTH FUND (Sept. 2002), http://www.commonwealthfund.org/~media/files/publications/fund-report/2002/sep/financial-performance-of-academic-health-center-hospitals--1994-2000/dobson_financialperformance_543-pdf.pdf (estimating that academic health centers' average costs were 27-39% higher than other organizations).

²⁷ See MPAC Report, *supra* note 22 (arguing that teaching hospitals' IME expenses are grossly exaggerated).

²⁸ Patient Protection and Affordable Care Act, 42 USC § 1395ww(d)(5)(B) (2015).

²⁹ *See id.*

³⁰ See Koenig, *supra* note 25, at 113; *see also* Dower, *supra* note 7, at 2. *But see* MEDICARE PAYMENT ADVISORY COMMISSION, REPORT TO THE CONGRESS ALIGNING INCENTIVES IN MEDICARE (June 2010) (arguing that Medicare's \$6.5 billion in IME supplemental payments to teaching hospitals actually *exceed* those hospitals' IME expenses by \$3.5 billion).

³¹ *See generally*, 42 C.F.R. § 412.105.

³² *See id.*

³³ *See, e.g.*, Balanced Budget Act of 1997, Pub.L. 105-33, 111 Stat. 251 (codified as amended in scattered sections of 17 U.S.C.) (decreasing IME factor from 7.7% to 5.5% over four years); *see also* Medicare, Medicaid, and SCHIP Balanced Budget Refinement Act of 1999, Pub.L. 106-113, 113 Stat. 1501 (codified as amended in scattered sections of 42 U.S.C.); *see also* Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act of 2000 (BIPA), Pub.L. 106-554, 114 Stat. 2763 (codified as amended in scattered sections of 42 U.S.C.) (delaying reductions to and revising short-term factors for IME payment methodology).

cover the costs of teaching hospitals' medical education programs, Medicare is the single largest financier of medical education in the United States.³⁴

In addition to Medicare's supplemental payments methodologies, many states' Medicaid programs have adopted payment formulas designed to provide increased funding to teaching hospitals.³⁵ By supporting graduate medical education through their Medicaid payment mechanisms, states are able to leverage federal matching funds.³⁶ Therefore, between states' spending through Medicaid and the accompanying federal matching funds, Medicaid is the second largest payer of graduate medical education costs nationwide.³⁷

Unlike the Medicare program, the federal Medicaid program contains surprisingly few restrictions or requirements on whether or how states support medical education through supplemental Medicaid payments.³⁸ Any such payments or support through a state's Medicaid program to teaching hospitals must be contained in an approved state plan amendment.

Although there are different approaches to the manner in which state Medicaid programs approach graduate medical education funding, some states follow Medicare's approach and provide support for both direct and indirect medical education.³⁹ For those states, as well as most that follow other formulas or definitions, the typical mechanism used to convey medical education funding in Medicaid programs is through their fee-for-service methodologies.⁴⁰ Thus, like Medicare, most Medicaid programs' graduate medical education financing comes in the form of supplemental payments or increased fee-for-service reimbursement rates for services provided to Medicaid enrollees.

If, however, a state relies on managed care organizations (MCOs) to administer coverage for Medicaid enrollees, the state's capitation rates to the MCOs must be adjusted to account for any medical education payments that

³⁴ See Dower, *supra* note 6, at 1.

³⁵ See Tim M. Henderson, *Direct and Indirect Graduate Medical Education Payments: A 50-State Survey*, ASS. OF AM. MED. C.'S 3 (Apr. 2010), https://members.aamc.org/eweb/upload/Medicaid%20Direct_Indirect%20GME%20Payments%20Survey%202010.pdf (documenting 41 states and the District of Columbia (DC) financially supporting graduate medical education in 2009). It should be noted, however, that the number of states investing in graduate medical education has dropped from 47 in 2005, and nine other states considered proposals to drop such investments in 2009. *Id.* at 3. It is also important to note that state Medicaid payments for medical education are in addition to any financial support states provide to medical schools through direct appropriations. See *id.* at 2 (noting that states spend \$5 billion in appropriations for medical training outside of Medicaid payments).

³⁶ See *id.* at 2, n.7.

³⁷ See *id.*

³⁸ See Tim M. Henderson, *Medicaid Graduate Medical Education Payments: A 50 State Survey*, ASS. OF AM. MED. C.'S 5 (2013) http://dhhs.nv.gov/uploadedFiles/dhhs.nv.gov/content/About/GMETF/2014/2014-05-14_Item12a_Medicaid_GME_2013_Report_AAMC.pdf.

³⁹ See *id.* (documenting five states that pay for both direct and indirect graduate medical education).

⁴⁰ See *id.* 2, 4 (documenting 40 states and Washington D.C.).

the MCOs are required to pay. Any capitation rate adjustments to MCOs for medical education must be made after the state first establishes actuarially sound capitation rates.⁴¹

The federal government's combined spending on graduate medical education through Medicare and states' Medicaid programs amounted to \$9.5 billion in 2010.⁴² Of that total amount, \$3 billion was in the form of direct GME supplemental payments and \$6.5 billion went for IME supplemental payments.⁴³ Since then, the 2015 federal budget cut \$960 million from GME funding⁴⁴

Because Medicare and Medicaid patients rarely incur different out-of-pocket costs based on whether they receive care at a teaching hospital or a general hospital, individual patients generally do not face particular incentives or consequences due to the fact that their hospital receives or does not receive supplemental medical education payments for the services the patients receive. As a result, these patients covered through public health programs have little incentive to make their care decisions based on the overall payment amount the hospital will receive. In such a payment environment, neither hospital is at a competitive disadvantage with respect to attracting patients insured through these public programs.

Although less intentional and measurable, commercial payers, such as health plans and self-insured employers, often have financial implications based on whether their enrollees receive care from a teaching hospital.⁴⁵ Because none of the public sector's supplemental payment streams fully cover teaching hospitals' actual costs of providing medical education and training experiences, to remain financially viable teaching hospitals must resort to negotiating higher reimbursement rates from commercial health plans and third party administrators. This practice, commonly referred to as cost shifting, essentially transfers and spreads a portion of the teaching hospital's medical education costs to the privately insured market.

For teaching hospitals trying to cobble together sufficient revenues to support their residency programs, this multi-faceted, indirect and complex medical education cost recovery system worked marginally well. However, in order for it to work without putting the teaching hospitals and their higher cost structures at a competitive disadvantage, several key elements need to be in place: (1) Public and private health plans pay for hospital services on a fee-for-service (FFS) basis; (2) Individual patients are shielded from incurring any out-of-pocket cost implications from receiving care from a

⁴¹ See 42 C.F.R. § 438.6(c)(5)(v).

⁴² See Dower, *supra* note 6, at 2.

⁴³ *Id.* at 2.

⁴⁴ See Michael Sandler, *Teaching Hospitals' Residency Levels Growing Slowly*, MODERN HEALTHCARE (Feb. 2, 2015), <http://www.modernhealthcare.com/article/20150202/NEWS/150139994>.

⁴⁵ Stuart Guterman, *Financing Teaching Hospital Missions: A Context*, HEALTH AFFAIRS (Mar. 2015), <http://content.healthaffairs.org/content/22/6/123.full>.

teaching or non-teaching hospital so their decision is not influenced by the overall cost structure differences between teaching and non-teaching hospitals; and (3) Hospitals in competitive markets have little or no information about what other hospitals were paid for particular services.

Each of these circumstances necessary for the current medical education financing system's functionality are becoming obsolete. New health care payment methodologies and cost transparency initiatives are explicitly designed to compare and differentiate between hospitals based on how much they cost—or, more accurately, how much revenue they receive—to treat patients. Under these new payment methodologies, whether they are bundled payments, total-cost-of-care shared savings arrangements, global payments, or capitation, hospitals that deliver patient care at lower costs (or for lower reimbursement) will receive benefits or advantages in a competitive market, and those that require higher revenues to deliver the same services or level of care will face negative financial incentives and/or find themselves as a competitive disadvantage.

Therefore, in these new payment methodologies, teaching hospitals' supplemental payments and higher negotiated commercial rates jeopardize their ability to remain competitive when they are compared to other hospitals. Teaching hospitals' opportunities for earning shared savings bonuses under accountable care organization (ACO) or total-cost-of-care (TCOC) models are more limited. While both teaching and non-teaching hospitals strive to reduce supply chain costs, decrease their patients' utilization of health care services and find greater efficiencies in their care delivery operations, teaching hospitals continue to carry the medical education portion of their overall costs and that portion is difficult to reduce without cutting the number of physicians being trained or eliminating the hospital's residency program entirely.

Similarly, as more individuals in the privately insured market obtain health coverage that features a high deductible, individuals have greater interest in the variation between hospital reimbursement rates. If one hospital has negotiated a higher reimbursement rate for a particular service from the individual's health plan, to the extent that the individual will bear all or part of that higher cost through his/her deductible, there is a real and tangible incentive to select a hospital that negotiated a lower reimbursement rate. Again, to the extent that teaching hospitals negotiate higher payment rates from commercial health plans to help offset a portion of their medical education expenses, they become less attractive to people with high deductible health plans.

Another outcome correlated with the increasing prevalence of high deductible health plans, is the growing efforts to make health care providers' "prices," or estimated costs of care, more transparent and publicly available. One driving force of these initiatives is giving individuals with high deductible plans more information with which to compare providers,

including hospitals, based on price so they may make health care decisions that align with their financial interests.

Although price transparency efforts have not yet received significant use by individuals, they are gaining attention from self-insured employers, health plans, the media and other providers who are interested in learning about variations in health care reimbursement rates. Therefore, while price transparency initiatives may evolve into tools used to influence individual patients' decisions, they also carry the potential to increase pricing competition among providers and hospitals and their private sector payers. Again, teaching hospitals face a competitive disadvantage to the extent that these transparency activities highlight the differences in reimbursement rates due to teaching hospitals' need to finance medical education and residency programs.

Another health care reform impacting teaching hospitals is the rise of health plans that offer narrow networks of providers that are considered "in network" for purposes of calculating the insured's coverage and benefits. To attract individual consumers shopping for coverage and comparing premium costs through health insurance exchanges and in response to increased pressure from employers looking to hold down their portion of premiums while continuing to provide health benefits for their employees, health insurers are designing and marketing insurance products with narrow networks of providers. Recognizing the premium price sensitivity in today's market, health plan companies seek to carve out higher cost hospitals and clinics from their networks, thereby enabling them to create strong financial incentives for their enrollees to receive care only from lower cost in-network providers.

Insureds who receive care from an out-of-network hospital, therefore, often face substantially higher out-of-pocket costs. In this way, narrow network health plans intensify cost-sensitive decision-making that is similar to and compounds the incentives individuals face under high deductible health plans. Because of their need for higher negotiated rates to help offset their graduate medical education program costs, teaching hospitals are more susceptible to being carved out from narrow network health plans.

Under these new payment methodologies, lights of transparency, and insurance plan designs, teaching hospitals will find themselves at an increasingly competitive disadvantage. Higher cost structures due to their residency and clinical training programs, supplemental payments incorporated into their care delivery reimbursements, and higher negotiated reimbursement rates with commercial payers leave teaching hospitals less competitive on total-cost-of-care measures and appearing to be more expensive compared to other hospitals, and more vulnerable to narrow-network plan designs.

Without medical education financing reform, teaching hospitals may face difficult choices between retaining their residency programs, which help

ensure that the health care system as a whole has trained physicians capable of delivering high quality care to an aging and increasingly diverse population, but becoming less competitive with other hospitals and facing the financial consequences that follow, or reducing or eliminating their residency programs in order to bring their cost structures more in line with their competitors.

The complexity of the current financing system and misguided proposals already under discussion add to the difficulty of implementing the needed reforms.

III. POTENTIAL BUT MISGUIDED AVENUES

Today's policy debate on the topic of graduate medical education tends to center on two simplified and conflicting views. Essentially, these views start from placing priority on one of two values: the need to meet the projected demand for physicians to care for individuals or the need to cut government spending. Entering the discussion from either of these two objectives has not led to proposals for practical, needed reforms to the medical education financing system.

On one hand, some policymakers point to predicted physician and health care workforce shortages and the increasing burdensome student debt carried by new physicians to support their calls for expanding public support of medical education. Based on these predictions of shortages and the financial strains already imposed on newly licensed physicians, these policymakers advocate for proposals such as increasing public financial support of scholarships, medical schools, GME or IME, loan forgiveness grants, etc. These proposed policy mechanisms are designed to address or mitigate particular financial challenges associated with medical education and training costs, and to create new or increased financial incentives to encourage the following stakeholders to make the following decisions:

- (1) College graduates to enter and complete medical school;
- (2) Medical schools and hospitals to offer educational and training opportunities necessary for those medical students to complete their education and training necessary to meet accreditation and licensing criteria, and;
- (3) Hospitals and clinics to recruit, hire and retain new physicians, especially those who agree to provide care in underserved communities, such as rural areas, or in particular specialties perceived to have a shortage of medical professionals, such as in the areas of primary care or psychiatry.

Proponents of these recommendations are able to enter these ideas into the policy debate because each of these recommendations has merit from

a health care workforce development perspective. However, they do not offer changes to the financial distribution methodology that are necessary for teaching hospitals to provide residency programs and compete on cost measures with non-teaching hospitals simultaneously.

Also, proposed incentives for college graduates to attend medical school and for new physicians to practice in certain geographic areas or specialties in return for loan forgiveness fail to address how to fund the teaching hospitals' residency programs that medical students will one day need before any of them are available to help fill gaps in access to care.

Instead, the only aspect of this set of "increased funding" proposals designed to support physician residency programs is a straightforward increase in funding, presumably through the existing supplemental payment methodology that leaves teaching hospitals vulnerable to the downside consequences of payment reforms and transparency initiatives.

On the other hand, state and federal budget deficits and increased concern over the rate of health care cost growth lead some policymakers to target the government's spending on graduate medical education for cuts. The total amount of federal spending on GME—almost \$10 billion—combined with MedPAC's claims that estimates of teaching hospitals' medical education costs are overstate, have been used to support proposals to reduce support for GME payments.⁴⁶

In addition to MedPAC itself, the National Commission on Fiscal Responsibility and Reform⁴⁷ recommended cutting federal GME and IME spending by \$6 billion.⁴⁸ Under this proposal, direct GME spending would be capped at 120% of the average resident's salary with future adjustments tied to the rate of inflation.⁴⁹ The Commission relied on MedPAC's characterization of medical education costs to suggest reducing IME funding to reflect actual costs more accurately.⁵⁰

President Obama's proposed budgets have suggested cuts to IME funding. Although he did not embrace capping direct GME payments as proposed by the Commission, he has proposed cutting GME funding for children's hospitals by 50%, and his most recent budget proposal includes \$16.3 billion of IME cuts over ten years.⁵¹

⁴⁶ CONGRESSIONAL BUDGET OFFICE, REDUCING THE DEFICIT: SPENDING AND REVENUE OPTIONS 43 (2011), <https://www.cbo.gov/sites/default/files/03-10-reducingthedeficit.pdf>.

⁴⁷ Also referred to as the Simpson-Bowles Commission.

⁴⁸ See NAT'L COMM'N ON FISCAL RESPONSIBILITY AND REFORM, THE MOMENT OF TRUTH 38, (Dec. 2010), https://www.fiscalcommission.gov/sites/fiscalcommission.gov/files/documents/TheMomentofTruth12_1_2010.pdf.

⁴⁹ *Id.*

⁵⁰ *Id.*

⁵¹ See Bob Herman, *Obama's 2016 Budget Cuts Medicare but Eliminates Sequestration*, MODERN HEALTHCARE (Feb. 2, 2015) <http://www.modernhealthcare.com/article/20150202/NEWS/302029967/obamas-2016-budget-cuts-medicare-but-eliminates-sequestration>.

These proposals are politically palatable on both sides of the partisan aisle because they promise to decrease health care related expenditures without directly cutting patient care or individual providers' income. Calls to hold graduate medical education at current levels or impose cuts seem more likely to be implemented than proposals to increase funding.

At the same time, the policymakers proposing cuts to graduate medical education spending are not suggesting that medical schools or teaching hospitals reduce the number of physicians being educated and trained.⁵²

Thus, assuming there is general political consensus that the number of physicians needed to provide sufficient access to care is expected to remain equal to or greater than current levels, and assuming the amount of public financial support for graduate medical education will remain static or decrease, on whom will the costs of medical education fall?

There are three predictable proposals for how the costs of residencies should be financed after cutting government spending on graduate medical education, each of which has shortcomings.

A. Require Teaching Hospitals to Absorb the Costs

The direct and indirect costs of residency programs are too high for teaching hospitals to simply "absorb" or self-finance. Instead, asking hospitals to absorb these costs is more accurately described as asking teaching hospitals to increase the rates they charge to private payers for the care patients receive.

As discussed earlier, hospital payment reforms and increased transparency will make it difficult for teaching hospitals to recoup medical education costs by charging higher rates to individuals and health plans.

Instead, under this approach, the pressure on teaching hospitals to reduce or eliminate their residency programs will intensify, especially if federal GME or IME funding is cut in the amounts being discussed in Washington, D.C.

B. Require the Physician Residents to Finance the Residency Portion of Their Training through Their Tuition or Direct Payments to the Teaching Hospital

Intuitively, many people jump to the following analysis: Physicians fall into high income brackets, therefore; Physicians have sufficient resources to repay medical education debt, therefore; Medical students should borrow to fund the cost of their education and then repay those loans during the high-income years that lie ahead.

⁵² See Dower, *supra* note 6 at 2.

While initially attractive in its simplicity, this analysis is not consistent with the practical realities faced by today's medical students and practicing physicians. Physician residents already shoulder significant financial burdens as they enter graduate school from their previous education. Medical education debt is an increasing burden for tomorrow's physicians. Moreover, the policy and patient care implications of medical debt, extend beyond the individual doctor's financial realities of student loans.

A recent study in the *Journal of the American Medical Association* found that medical residents carrying higher debt loads experienced higher rates of burnout.⁵³ More concerning, however, is that the study showed that residents' medical knowledge appeared to suffer when their education debt was more than \$200,000.⁵⁴ And, as one might expect, residents with both high education debt and emotional exhaustion performed even more poorly on medical knowledge tests.⁵⁵ Although the study was inconclusive, its authors were troubled by the correlation of higher educational debt with emotional exhaustion and poorer performance on tests of medical knowledge during one's residency.⁵⁶

Therefore, policy proposals that rely upon simply shifting residency and teach hospitals' associated costs to the physician resident can be expected to generate several undermining consequences:

- (1) Discouraging some individuals from pursuing medical careers because of concerns about the subsequent debt obligations;
- (2) Prohibiting some of those who do complete their education and training from entering certain types of practice, such as primary care, or from practicing in certain areas of the country, such as rural communities, due to their need for higher incomes;
- (3) Reducing the resiliency and length of career of physicians with higher debt loads and earlier burn out; and/or
- (4) Potentially diminishing the quality and safety of care patients receive from those physicians stressed by financial debt and the corresponding emotional burnout.

⁵³ See West, *supra* note 17, at 952; see also *id.* at 954 (noting that quality of life and satisfaction with work-life balance suffered with higher education debt amounts); see also *id.* at 955 (noting that emotional exhaustion and depersonalization increased with higher education debt amounts).

⁵⁴ See *id.* at 955 (stating that residents' performance on the Internal Medicine In-Training Examination decreased by a statistically significant amount for those reporting debt exceeding \$200,000).

⁵⁵ See *id.* at 959.

⁵⁶ See *id.* at 958.

C. Require Medical Schools to Pay Teaching Hospitals for Providing Residency Training to Their Students

Under this approach, it is reasonable to expect that medical schools would need to simply transfer this additional expense to students through higher tuition charges. Consequently, this approach suffers from the same hazards as the philosophy that expects physicians to borrow or self-finance their own residencies.

IV. PROPOSED PATH FORWARD

Under new health care payment reforms that use measures of efficiency or costs of care to vary hospitals' reimbursement amounts, supplemental GME and IME payments create significant problems for the long-term viability of residency and clinical programs.

Even without addressing the different functions of the care delivery payment system and building a medical education financing structure that is separate from calculations of providers' costs of care, it is clear that teaching hospitals will face increasing financial and market pressures to reduce or even eliminate their training programs. At a time when many commentators predict substantial shortages in caregivers, especially primary care physicians, restricting the number of training and residency slots available runs counter to the goal of meeting communities' health care workforce needs.

Furthermore, supplemental payment structures misalign incentives because a teaching hospital's total medical education payments will fluctuate based on the number of Medicare or Medicaid patients it serves. This is particularly true for most state Medicaid programs because the federal government will not match state spending unless it is based on the volume of services teaching hospitals provide to Medicaid beneficiaries, not on other bases more closely aligned with graduate medical education, such as per resident allocation.⁵⁷ As a result, teaching hospitals that serve populations with large numbers of Medicare or Medicaid enrollees may receive significant supplemental payments even though they may not have correspondingly large training or residency programs, and vice versa for teaching hospitals with large training programs in communities with proportionately smaller populations of public program enrollees.

One potential risk to developing a new payment system is that it could make medical education funding more politically vulnerable to being cut. Today, such cuts are difficult for elected officials to support because imposing the cut essentially reduces Medicare or Medicaid payments, which

⁵⁷ See generally Patient Protection and Affordable Care Act, 42 U.S.C. § 1396d(b) (2015).

seem threatening to voters worried about losing access to care or covered benefits.

Therefore, any new financing systems need to be joined to policies or safeguards that establish long-term sustainability and predictability so teaching hospitals can appropriately plan ahead and make reliable commitments to the residents, nurses, pharmacists, and other professionals who agree to train in their facilities.

A foundational objective for graduate medical education finance reform should be to detangle payments to reimburse providers for care delivered to patients from payments for educating and training the physicians and caregivers of the future. So long as GME payments to teaching hospitals are interwoven with payments to teaching hospitals for care delivery, it will be difficult for teaching hospitals to compete under new payment methodologies and consequences of price transparency activities.

By detangling support for medical education activities from reimbursement for care delivery, it will be easier for payers—both public and private—to compare the performance of hospitals on more equal terms. Teaching hospitals would need to be able to deliver patient care for the same or lower costs than their competitors or suffer the market's consequences.

At the same time, because the financing of their residency programs would not depend on the kinds or volume of services they provide to particular patient populations, or face elimination because of a hospital's need to reduce the appearance of having high-cost care delivery, teaching hospitals could have greater confidence in the sustainability of their residency programs.

In order for such parallel financing systems to work, there will need to be a method for identifying and distinguishing which portion of a payment to a hospital is for patient care and which portion, if any, is for graduate medical education.

State and federal regulatory restrictions should be adopted to preclude Medicare, Medicaid or any other public program, as well as commercial health plans, self-insured employers or other entities, such as those seeking greater price transparency, from including the GME portion of a hospital's revenue in any calculation of the hospital's total-cost-of-care, efficiency or other formula intended to compare or evaluate hospitals based on their care delivery. In other words, once the distinction between revenue from care delivery and revenue from medical education programs is clear, no one should be allowed to re-tangle the two for purposes of comparing one hospital's cost of care to another's.

Of course, the current GME system does not offer the kind of precision in cost accounting necessary for establishing how much the public or private payers should pay to support teaching hospitals' education and training programs. Therefore, a multi-stakeholder task force comprising representatives of teaching hospitals, public and private payers, and independent third party auditors, should attempt to track and calculate as-

close-to-actual costs of GME programs as possible. Although no methodology or calculation will perfectly account for every variation between residency programs, establishing a more objective baseline will enable policymakers to adequately adjust existing expenditures to align with teaching hospitals' costs.

Once such a cost accounting methodology exists, there will no longer be a need for Medicare or Medicaid programs to distinguish between direct GME and IME payments, so these can collapsed together. Doing so will reduce administrative complexity while enhancing the kind of transparency need to clearly distinguish between payments for care and payments for education. Likewise, because a more precise measure of actual costs of GME activities will be available, the financing system should shift to calculating GME payments based on the number of residents trained, perhaps with adjustments to create incentives for increasing the number of physicians who will practice in shortage areas, rather than the number of Medicare or Medicaid beneficiaries treated.

As noted earlier, once these payments are distinguishable from one another, it might be politically expedient for elected officials to cut spending on graduate medical education because they could point to their efforts to protect payments for care delivery from cuts. Not only does the threat of funding cuts jeopardize the financial sustainability of residency programs, the prospect of GME support becoming a fluctuating bobber rising and falling with year-to-year or election-to-election political or budgetary waves would erode teaching hospitals' confidence in their financial wherewithal to extend what are often three- to seven-year commitments to physicians looking for residencies.

Therefore, while detangling GME payments from care payments is necessary to allow teaching hospitals to survive under new payment methodologies and transparent environments, the GME payments should continue to flow through Medicare and Medicaid programs in a manner that prevents legislators or regulators from cutting GME without simultaneously cutting reimbursement rates for care delivery.

Finally, policymakers will need to decide what portion of GME costs should be borne by privately insured populations. Because Medicare and Medicaid are funded through broad-based taxes. If GME programs were supported exclusively through these public programs the GME programs would arguably be supported by everyone. On the other hand, given estimates of current Medicare and Medicaid spending relative to teaching hospitals' costs for residency programs, it seems unlikely that increasing those public programs' expenditures to the levels necessary to fully finance GME will be practical.

Instead, Congress should consider a "covered life assessment" that would be paid by commercial health plans, third party administrators of self-insured employers' plans, and Medicare Advantage and Medicaid-managed care organizations. The revenues from this assessment would be dedicated to

Medicare and used exclusively for the GME portion of teaching hospitals' Medicare payments. Although such an assessment would face significant political pushback from business groups, advocates opposed to tax increases or government programs, and health plans, such a tax would better reflect the reality that everyone who accesses the health care system benefits from the medical education and training their caregivers received at the outset of their careers.

V. CONCLUSION

If left unchanged, current financing systems supporting teaching hospitals' physician residency programs will begin to work against the teaching hospitals' sustainability. Teaching hospitals struggle to compete against non-teaching hospitals with lower cost structures under new payment reforms, increased transparency, and the natural economically motivated decisions that accompany the increasing reliance on high deductible health plans and narrow provider networks. Teaching hospitals will be forced to decide between fulfilling their mission-driven commitment to educating and training the workforce of tomorrow at the risk of financial ruin or abandoning their residency programs to cut costs that allow them to compete head-to-head with hospitals unburdened by those costs. This impossible choice can and should be avoided.

By detangling GME payments from reimbursements for care delivery, new payment models, price transparency initiatives, and health plan design innovations will progress in a fashion that evaluates hospitals solely on the costs of care delivery without confusing such analysis with costs associated with supporting GME programs.

For such detangling to work for payers, teaching hospitals, policymakers and consumers, there must be guardrails that establish greater long-term certainty of financial support for GME programs, continued use of Medicare and Medicaid programs as the backbones for allocating GME support preferably on a per resident basis, and the implementation of a national covered lives assessment or similar broad based surcharge on commercial insurers, third party administrators and managed care organizations in public programs to ensure that GME programs are supported by all of those who benefit from the physicians and caregivers they train.