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Donald M. Berwick, M.D.
Gail R. Wilensky, Ph.D.
Co-Chairs
Committee on the Governance and Financing
of Graduate Medical Education
c/o Jill Eden
Institute of Medicine
500 Fifth Street, NW
Washington, DC 20001

Dear Drs. Berwick and Wilensky:

The Association of American Medical Colleges (AAMC) respectfully submits this letter in response to the report issued July 29 by the Institute of Medicine's (IOM) Committee on the Governance and Financing of Graduate Medical Education. We are pleased that the committee acknowledges the importance of long-term, stable funding for graduate medical education (GME). Likewise, we appreciate that the committee shares the vision for innovating and strengthening medical education, training, and practice that the AAMC, its members, and other stakeholders have been working to achieve and advance. However, we wish to register a number of concerns regarding the unintended consequences many of the report's recommendations will have on both the physician workforce and patients' access to lifesaving care.

We have spent the last several months collecting perspectives and composing an evidence-based response to the product of the committee's two years of deliberations. We always have welcomed the opportunity to work with stakeholders to enhance medical education in a manner that prioritizes patient safety and access, and we submit the accompanying comments prepared by AAMC staff to continue that tradition.

As you know, the AAMC is a not-for-profit association representing all 141 accredited U.S. and 17 accredited Canadian medical schools; nearly 400 major teaching hospitals and health systems, including 51 Department of Veterans Affairs (VA) medical centers; and nearly 90 academic and scientific societies. Through these institutions and organizations, the AAMC represents 148,000 faculty members, 83,000 medical students, and 115,000 resident physicians.

Working in partnership with the nation's medical schools, AAMC-member teaching hospitals account for 22 percent of all inpatient admissions, 18 percent of all Medicare discharges, and 25 percent of all Medicaid discharges. They treat the country's most medically vulnerable patients from all socioeconomic backgrounds, accounting for 37 percent of the country's charity care costs. Patients and hospitals nationwide rely on members of the AAMC Council of Teaching Hospitals and Health Systems (COTH)—which represent only 5 percent of all hospitals in the nation—to step in when other facilities lack the resources or the physician expertise necessary to address a patient's complex or acute health care needs. For example, in 2011, COTH members

received 38 percent of all transfers from rural, urban, and suburban facilities. AAMC-member institutions represent 15 percent of all emergency room visits, 19 percent of all outpatient surgeries, and 24 percent of all other outpatient visits, extending a comprehensive array of health care services to Americans across the country.

AAMC medical schools and teaching hospitals conduct more than half of the extramural research supported by the National Institutes of Health (NIH), pushing the boundaries of medicine in ongoing pursuit of the diagnostics, preventive interventions, and treatments that will alleviate the burden of disease and disability for millions in the United States and around the globe. For all Americans, the individuals at these institutions perform medical miracles every day, whether by reattaching a severed limb, giving a preterm baby a chance at life, connecting an individual to health insurance coverage for the first time, or achieving a breakthrough in the development of a lifesaving treatment.

These institutions are also the primary training grounds for the health care workforce, including three-quarters of the nation's physician residents among many other health professionals.

The AAMC believes that after medical school, the education of residents and fellows is best carried out in an environment characterized by:

- Learners from a variety of medical specialties and other health professions to ensure experience working as part of a larger and dynamic multidisciplinary and multiprofessional team;
- A significant level of educational infrastructure and oversight, including teaching/assessment of the six core competencies required by the Accreditation Council for Graduate Medical Education (ACGME) and significant opportunities for direct observation, appropriate supervision, and graduated responsibility in the care of patients as learners achieve specified milestones of competence;
- The presence of faculty who are engaged in expanding medical knowledge through clinical research;
- Regular interaction with a diverse array of patients, conditions, and care settings throughout the community; and
- Innovation in clinical care delivery and commitment to patient safety and access to care.

Simply put, this is the environment provided by the nation's major teaching hospitals, which are sponsors of or affiliated sites for the majority of the nation's residency programs and are the models for physician training around the globe.

In addition to inpatient facilities, these entities regularly partner with VA ambulatory services, community/federally qualified health centers, private physician offices, and other similar settings, to provide trainees with a range of learning opportunities. According to ACGME, 93 percent of GME programs in specialties that lead to initial board certification currently place residents in non-hospital and ambulatory settings for portions of their training. By balancing residents' hospital training with these ambulatory experiences, residents are exposed to the full spectrum of care, from basic, preventive measures to highly specialized, complex care. This comprehensive training experience provides the opportunity for the development of competencies critical for the care of patients no matter the physician's future practice setting.

The committee's report observes that since the Medicare program's inception, the special mission of resident education has been supported by Medicare direct graduate medical education (DGME) payments to partially offset the education costs of teaching hospitals. The report does not acknowledge, however, that in practice, analysis of Medicare cost reports reveals DGME payments cover only a small fraction—less than one quarter—of the costs, such that the largest contributor to the direct costs of GME often is the teaching hospital itself.

As you know, the Medicare program also provides so-called Indirect Medical Education (IME) payments to teaching hospitals in recognition of the failure of the diagnosis-related group (DRG) patient classification system to capture fully the differences in patient severity of illness. IME payments are patient care payments, not education payments, despite their label. Contrary to the report's suggestion, no explicit funding sources exist to help sustain the unique, indispensable services that teaching hospitals offer surrounding communities. These services are provided while institutions are simultaneously training the next generation of health professionals and forging ahead toward the frontiers of medical science. Without IME payments, academic medicine would be forced to reevaluate the financial viability of its intersecting missions of education, research, clinical care, and community service.

As the nation grapples with physician and other health care workforce shortages—including, but certainly not limited to provider maldistribution—the AAMC appreciates the interest of the report's requesting parties in better understanding federal investments in training programs. The nation's medical schools and teaching hospitals are committed to accountably preparing the workforce to achieve the vision outlined in the committee's report, and they are actively pursuing a number of innovations across the continuum of medical education toward that goal.

However, we are disappointed that the committee paints an incomplete picture of the critical necessity of the federal investment in generating a workforce to meet the nation's needs and in supporting the highest level of patient care at teaching hospitals nationwide. We have concerns that, despite intentions to the contrary, many of the report's recommendations would undermine patient access to care by jeopardizing physician training at a time of needed growth and by weakening support for the lifesaving services that often are available only in academic medical centers.

In some cases, the report touts legislative or regulatory reforms that duplicate efforts already underway at academic medical centers. At other points, the report proposes upending a proven, successful system in favor of untested "solutions" that lack evidence of effectiveness. While we welcome the committee's interest in transforming the GME system with new approaches to physician training, we question the effectiveness of experimenting toward this goal in a way that would seriously and negatively impact the current system. Though the report describes a "phased" approach to its recommendations, under the committee's own projections, implementation of the proposal would result in steep, immediate cuts to existing programs, amounting to more than 30 percent for individual hospitals. The consequences of such a pursuit would ripple beyond the teaching hospital itself, affecting affiliated medical schools, medical students and residents, patients, and their communities.

Like many federal policies, public support for GME reflects a patchwork of initiatives intended to address evolving needs over time; the nature of the legislative process predicts that such piecemeal approach likely will continue even if an "ideal" system were to be implemented today. We caution that well-intended efforts to address inefficiencies through a wholesale overhaul as

proposed in the report can yield unintended consequences that may in fact cause more harm than progress.

In the hopes of continuing the open dialogue upon which the IOM was originally founded, the AAMC offers the accompanying detailed comments prepared by AAMC staff as suggestions we believe will strengthen the committee's report by correcting and clarifying some key points, providing additional information, and presenting alternative perspectives on the issues addressed. While elements of the committee's report may affect individual AAMC-member institutions variably, our comments are guided by principles that will enable academic medicine as a whole to advance its long-standing commitment to education, research, patient care, and community service.

Through their integrated missions, medical schools and teaching hospitals make unparalleled contributions to improving medical care in the United States and around the globe. With the nation facing an unprecedented and growing demand for health care services, continued support for these institutions is essential. We invite the committee to engage the AAMC's insights and expertise on medical education, care delivery, and physician workforce policies as we strive toward our mutual goal of improving health and health care for all.

Sincerely,

Darrell G. Kirch

Darrell G. Kirch, M.D.

cc: Victor J. Dzau, M.D.

AAMC Comments on Report of the IOM Committee on Governance and Financing of Graduate Medical Education
January 15, 2015

The AAMC offers the following comments as suggestions intended to enhance the committee's report by correcting and clarifying some key points, providing additional information, and presenting alternative perspectives on the issues addressed. These comments conclude with a summary of the AAMC's physician workforce policy recommendations, as well as an appendix of statements in the committee's report that we believe could benefit from additional clarification.

As the health care system evolves, medical education too must evolve. Medical schools and teaching hospitals are committed to advancing this transformation in a manner that prioritizes patient safety and access. The AAMC believes that after medical school, the education of residents and fellows is best carried out in an environment characterized by:

- Learners from a variety of medical specialties and other health professions to ensure experience working as part of a larger and dynamic multidisciplinary and multiprofessional team;
- A significant level of educational infrastructure and oversight, including teaching/assessment of the six core competencies required by the Accreditation Council for Graduate Medical Education (ACGME) and significant opportunities for direct observation, appropriate supervision, and graduated responsibility in the care of patients as learners achieve specified milestones of competence;
- The presence of faculty who are engaged in expanding medical knowledge through clinical research;
- Regular interaction with a diverse array of patients, conditions, and care settings throughout the community; and
- Innovation in clinical care delivery and commitment to patient safety and access to care.

Simply put, this is the environment provided by the nation's major teaching hospitals, which are sponsors of or affiliated sites for the majority of the nation's residency programs and are the template for physician training around the globe. AAMC-member medical schools and teaching hospitals also conduct more than half of the extramural research supported by the National Institutes of Health (NIH); maintain the majority of specialty services such as Level 1 trauma centers (79 percent), pediatric intensive care units (59 percent), and burn unit beds (68 percent); and account for 23 percent of all clinical care and 37 percent of hospital charity care.

These institutions regularly partner with community-based and ambulatory facilities to enhance the educational experience for learners. In fact, ACGME reports that nearly all (93 percent) graduate medical education (GME) programs in specialties that lead to initial board certification currently place residents in non-hospital settings for portions of their training.

Still, the AAMC recognizes that workforce challenges persist, including some of the gaps that the committee identifies. However, we are concerned that the committee's analysis is incomplete in many areas, and the report's proposed solutions are premised on assumptions that are not fully

supported. For example, while there is a clear need to improve workforce distribution, the committee appears to be under the impression that legislation is required (and sufficient) to enable non-teaching and rural hospitals to establish new residency programs with Medicare support. Similarly, the committee seems to expect that GME financing is an effective lever in resolving some persistent workforce challenges, despite data to the contrary.

Because the committee's analysis is incomplete in this regard, the report overlooks numerous initiatives already underway that are addressing the committee's concerns without the need for legislation. The committee also misses the opportunity to explore a number of alternative solutions that could accelerate some of these ongoing efforts and/or more directly address obstacles. In the example above regarding non-teaching or rural hospitals, a more complete analysis might have uncovered challenges that these facilities face in recruiting and supporting faculty or in making the initial investments required to launch a residency program. Given that these entities already qualify for Medicare GME funding (in some cases, with added incentives), these issues potentially could be resolved more effectively by providing start-up grants or other support to aspiring programs, rather than by reconfiguring the current GME financing system.

Instead, the report's recommendations shift Medicare funding to entities that do not serve substantial numbers of Medicare beneficiaries and therefore suggest a misunderstanding of how GME funds support clinical care services for the most medically vulnerable patients. As a result, by the committee's own estimates, the recommendations would have the most negative impact on hospitals with the greatest number of Medicare discharges and greatest number of residents.

The AAMC provides these comments to clarify some of these misinterpretations, more thoroughly address the unintended implications for patients nationwide, and offer alternatives that we suggest the committee could have explored to best advance its goals. While elements of the committee's report may affect individual AAMC-member institutions variably, our comments are guided by principles that will enable academic medicine as a whole to advance its long-standing commitment to education, research, patient care, and community service.

These comments are organized in the following sections:

1. Augmenting Medicare GME Support to Preserve Access to Health Care Services for Medicare Beneficiaries and Others
2. Sustaining Support for Vital Patient Care Services Offered Primarily at Major Teaching Hospitals
3. Addressing Geographic Distribution
4. Enhancing Transparency and Accountability
5. Evaluating Physician Shortages and Specialty Composition
6. Academic Medicine Actively Responding to the Nation's Health Needs
7. AAMC Physician Workforce Policy Recommendations

1

AUGMENTING MEDICARE GME SUPPORT TO PRESERVE ACCESS TO HEALTH CARE SERVICES FOR MEDICARE BENEFICIARIES AND OTHERS

Summary of this Section:

- The AAMC applauds the committee for recognizing that stability and continuity in funding is indisputably essential to physician training, and that payers beyond Medicare and teaching hospitals have contributed relatively less to cover the costs of graduate medical education (GME). While the AAMC appreciates the committee's desire to bolster support to other stakeholders engaged in residency training, any proposed solutions should augment the existing investment for training and other related vital missions at teaching hospitals nationwide.
- The committee's recommendation to divert Medicare funding to settings that devote little or none of their care to Medicare patients contradicts the committee's stated principles of "good governance" and greater "accountability" for public funding, as it relegates the Medicare program to being a mere funding source.
- Congress created the Medicare program to secure access to health care services for seniors, and the government consistently has recognized its responsibility to invest in the infrastructure necessary to make that coverage meaningful, including physician training. Likewise, the overwhelming majority of physicians participate in the Medicare program.
- Tying the Medicare GME payment to an institution's Medicare volume ensures that Medicare continues to pay *only its share of the costs* rather than the full costs of training, an important point that often is overlooked.
    - The AAMC first endorsed "all-payer" support for GME decades ago, so that the mechanism for financing GME would extend beyond Medicare to reflect the full spectrum of entities benefiting from such investments.
    - As we did then, we welcome the opportunity to work with stakeholders toward a system that augments existing investments in physician training.
- The Medicare direct graduate medical education (DGME) payment methodology does not disincentivize training in community-based settings, as the report suggests.
    - Medicare already reimburses such settings for DGME. Currently, were a teaching hospital to be reimbursed for DGME in the same manner as a community-based setting, it would recover a far greater percentage of its costs.
    - The level of funding community-based settings receive for DGME simply corresponds to their (generally low) Medicare volume.
- By the committee's own estimates, the committee's recommendation would have the greatest negative impact on hospitals training the most residents and/or treating the largest number of Medicare patients, by shifting funding away from these facilities to bolster support to non-Medicare serving entities.
    - The sample projections in the committee's report forecast cuts of more than 30 percent resulting from the indirect medical education (IME) reduction alone.
    - A more appropriate recommendation would have been to propose alternative, supplemental sources to remedy the funding challenges non-Medicare-serving entities face in their training efforts.

The AAMC has strong concerns about the committee's proposal to redirect Medicare GME support to entities that do not serve substantial numbers of Medicare beneficiaries. The report directs the Centers for Medicare and Medicaid Services (CMS) in awarding GME funding to

disregard the extent to which these entities care for Medicare beneficiaries. It is unclear how this recommendation is consistent with the "fundamentals of good governance" that the committee establishes as the foundation for its recommendations (pgs. S-8 and 5-12) or with the committee's goal of "rational, efficient, and effective use of public funds for GME" (Box 5-2, pg. 5-5).

As the committee reiterates throughout the report, the public has entrusted recipients of federal resources to be accountable; there is no more central measure of accountability than to remain true to the intent of the funding, and there is no more central intent of Medicare funding than to serve Medicare beneficiaries. Proposing to restructure the Medicare GME payment methodology by establishing a guaranteed payment to facilities regardless of their service to seniors dismisses this core objective in a way that relegates the Medicare program to being a mere funding source. Currently, Medicare reimburses all providers, including teaching hospitals, based on the volume of Medicare patients treated at each institution or based on the institution's "Medicare share." As laudable as the committee's objectives may be, the AAMC believes the current distribution of Medicare funding on the basis of an institution's Medicare volume is the more appropriate methodology.

Rationale for Medicare GME Support

The report describes deliberations among committee members regarding the rationale for continuing federal funding—and, specifically, Medicare funding—for physician training (pgs. S-3, 1-10, and 5-13), given the absence of similar federal support for "other areas important to society and in shortage." The committee ultimately concludes that the "stable funding" provided through Medicare is vital to ensuring physician training stability in a way that discretionary appropriations cannot achieve (pg. 5-4), and therefore should be continued—a view the AAMC shares. However, the committee also asserts that the "purchasing power" associated with Medicare (pgs. S-11 and 5-22) presents an opportunity for "strategic investment in the physician workforce," and that "there is no current rationale for linking GME funding to Medicare patient volume because the care delivered by GME trainees and graduates extends across the population" (pg. 5-22). On this basis, the committee puts forward its recommendation to redirect Medicare funding to settings that do not treat substantial numbers of Medicare beneficiaries, also recommending that after a 10-year period, the "ongoing need for Medicare GME funding should then be reassessed" (pgs. S-8, S-9, 5-1, and 5-13).

The justification for continuing Medicare GME support is more straightforward than the report suggests. Congress created the Medicare program to ensure access to health care services for the nation's seniors. From the program's inception in 1965, Congress established a reimbursement policy to ensure that total Medicare inpatient reimbursement would be sufficient to enable teaching hospitals to provide the elderly with their specialized services, which seniors disproportionately need and use. Even when it sought to limit Medicare spending through the institution of a DRG-based inpatient prospective payment system in 1983, Congress called for both DGME and IME adjustments to support access to teaching hospitals [#1]. In doing so, Congress also explicitly recognized that its GME adjustments fulfilled Medicare's responsibility as a major insurer of health care to pay its share of the investment needed to secure such access to care [#2, #3].

With less than 1 percent of all physicians in clinical practice formally "opting out" of the Medicare program [#4], the government has a continued responsibility to invest in the infrastructure required to make that insurance coverage meaningful for beneficiaries, including the physician workforce that provides such care. Thus, the AAMC unequivocally believes that preserving Medicare's contributions to physician training is not only appropriate, but also is essential to securing access to high-quality health care services for the aging population. There are few other professions that are similarly intertwined with a federal public entitlement program; even for those that are, it would be more logical to argue that such professions deserve similar federal investments than to argue to discontinue Medicare GME support on the basis that other professions do not receive comparable training support.

Absence of Other Payers Beyond Medicare

Similarly unclear is the committee's suggestion that Medicare GME funding should be decoupled from an institution's Medicare volume because Medicare-supported trainees and graduates treat more than just Medicare patients. As cited above, the overwhelming majority of physicians participate in the Medicare program, so the Medicare investment yields the expected outcome. While the committee correctly observes that trainees and graduates also care for patients covered by other insurers, such an observation would argue for supplementing Medicare's residency training support with contributions from other payers. Yet, the committee surprisingly eschews the opportunity to recommend an "all-payer" approach (pgs. S-3 and 5-4), rather choosing to extend the benefits of Medicare funding to settings that primarily (or solely) treat patients covered by those other insurers.

As the report describes, other federal payers, such as Medicaid, Children's Hospitals Graduate Medical Education (CHGME) and other programs administered by the Health Resources and Services Administration (HRSA), and the U.S. Departments of Veterans Affairs (VA) and Defense, contribute some residency training support. These funding sources have manifested over time as new, changing, and previously unmet needs have been identified. For example, over three decades ago, HRSA began providing support for preventive medicine residencies, for which training spans both clinical medicine and public health; HRSA payments are intended to support training activities in settings that traditionally would not garner substantial Medicare payments, such as state, local, and tribal health departments [#5].

Like Medicare, these alternative funding streams do not always cover the full costs of physician training and either must be renewed annually through the federal appropriations process or through state budget approvals. The precarious nature of many of these funding sources is destabilized even further by partisan politics and periods of fiscal uncertainty, such as those we currently face at the state and federal levels.

Meanwhile, private payers contribute little to no explicit funding to offset the costs of physician training and highly specialized, complex clinical missions, leaving Medicare to be the primary funder of GME aside from teaching hospitals themselves. As a result, the current mechanism for financing GME does not reflect the full spectrum of entities benefiting from the product of such investments. A recommendation to remedy this skewed dynamic is notably absent from the committee's report. The AAMC endorsed "all-payer" support for GME decades ago, when the association called for "broad-based societal support" and "shared responsibility" funds for

physician training [#6]. As we did then, we welcome the opportunity to work with stakeholders toward a system that augments the existing investments in physician training. We note, however, that any such system must build on the existing infrastructure for financing GME to prevent destabilizing the training enterprise at a most sensitive time.

Any efforts to reform GME financing should supplement, rather than replace, existing funding sources. Eliminating existing funding streams risks diluting or forfeiting the targeted focus that each program was intended to address. Equally troubling, in an era of fiscal austerity, we have concerns that the committee's decision to repurpose existing GME funds could be misinterpreted to signify redundancy of federal resources, rather than acknowledging the complementary necessity of these investments.

The report acknowledges, "It is important to note that Medicare GME funding was never intended to cover teaching costs for non-Medicare patients" (pg. 3-5). Indeed, tying the Medicare GME payment to an institution's Medicare volume is critical to ensuring that Medicare continues to pay *only its share* of the costs rather than the full costs of training, an important point overlooked in the committee's recommendations.

Medicare GME Methodology Does Not Disincentivize Training in Community-Based Settings
This principle of allocating Medicare resources in accord with Medicare share is also key to clarifying a misleading premise based on claims that ambulatory, community-based, and/or other primary care-oriented settings are deliberately disadvantaged (pgs. S-6, 3-1, 3-13, 3-33, 3-34, and 5-7), because the current GME payment methodology is designed to promote hospital-based, specialty training. For example, the report states that the payment formulas "systematically disadvantage residency programs that are based in non-hospital ambulatory care settings" (pg. 5-7) and that "[p]rimary care residency programs are at a distinct disadvantage because of their emphasis on training in ambulatory care settings" (pg. 3-33). The report's basis for this contention is that community-based entities receive less funding than their counterparts, noting on page 3-13 that "community-based ambulatory care sites and other non-hospital sites are eligible for significantly less funding than teaching hospitals."

Training programs at federally qualified health centers (FQHCs), rural health clinics (RHCs), and critical access hospitals (CAHs) currently are eligible for DGME payments to cover expenses related to resident stipends and benefits, faculty salaries and benefits, and allocated institutional overhead. Unlike teaching hospitals—which only receive payments for a small fraction of the expenses they incur—these facilities are reimbursed for their allowable costs.

In fact, because Medicare payment methodologies reimburse the above-mentioned settings more generously than the prospective payment system reimburses most teaching hospitals, it could be argued that community-based settings that assume the costs of residents' stipends and benefits actually enjoy an advantage in recovering their DGME costs. Figure 1 illustrates the hypothetical scenario of a teaching hospital whose direct teaching costs amount to $152,000 (hospitals' average DGME cost per trainee based on 2012 Medicare cost report data) and whose Medicare volume is 40 percent. As seen in the table, the Medicare DGME payment the hypothetical teaching hospital receives only covers a small fraction (27 percent) of the direct expenses that the hospital incurs—and even less (17 percent) if the hospital were to train residents above its cap.

Figure 1: What if Hospital DGME Payments Were Like Community-based Settings?

The chart below outlines how a hypothetical teaching hospital would be reimbursed for its Direct Graduate Medical Education (DGME) costs if it were reimbursed in the same manner as community-based settings. The hospital's DGME costs and Medicare share are applied across the other settings, but under the FQHC, RHC, and CAH methodologies, it would recover a greater portion of its costs. (Calculations are detailed in Appendix A).

	Teaching Hospital at/below 1996 cap (Cap: 25, FTE: 25)	**Teaching Hospital** above 1996 cap (Cap:25, FTE: 40)	**Teaching Hospital Paid Like FQHC or RHC** (FTE: 25)	**Teaching Hospital Paid Like CAH** (FTE: 25)
Hospital's DGME Cost per Resident	$152,000	$152,000	$152,000	$152,000
Hospital's Medicare Share (% of bed days)	40%	40%	40%	40%
Medicare Reimbursement per Resident	$41,480	$41,480	$60,800	$61,408
Hospital's Total DGME Costs for All Residents	$3.800 million	$6.080 million	$3.800 million	$3.800 million
Hospital's Total Medicare Reimbursement for DGME	$1.037 million	$1.037 million	$1.520 million	$1.535 million
Difference between Total DGME Costs and Total Medicare Reimbursement	- $2.763 million	- $5.043 million	- $2.280 million	- $2.264 million
Percent of DGME Costs Recovered	**27%**	**17%**	**40%**	**40.4%**

FQHC: federally qualified health center; RHC: rural health clinic; CAH: critical access hospital

By contrast, if that hypothetical teaching hospital were to receive DGME payments in the same manner that FQHCs, RHCs, and CAHs currently are reimbursed by Medicare for DGME, it would recover a far greater percentage of its costs—40 percent under the FQHC/RHC methodology and 40.4 percent under the CAH methodology (demonstrated in the table by applying the hospital's costs and Medicare share to the DGME payment methodologies for the other settings).

As described above, DGME payments to both teaching hospitals and community-based settings are calculated with respect to the facility's Medicare share, reflecting how many Medicare patients it serves. FQHCs, RHCs, and CAHs generally treat a relatively low volume of Medicare beneficiaries; therefore, the level of DGME funding they receive from Medicare simply corresponds to that low volume. In other words, the perceived "disadvantage" the committee identifies is that community-based facilities do not fulfill the primary condition of receiving additional Medicare funding: treating additional Medicare patients.

According to impact analyses in the committee's proposal, entities that do not care for substantial numbers/proportions of Medicare beneficiaries would see a disproportionate benefit, while those who care for more seniors would suffer the greatest losses. This projection is depicted in Table F-3 of the committee's report (a portion of which is recreated in Figure 2 below). The report explains, "The largest redistribution relates to the delinking of GME payments from the hospital's Medicare caseload," further specifying that "[r]esidents in hospitals with a relatively large number of Medicare discharges or high Medicare share will have reduced GME funding relative to hospitals with a smaller number of Medicare discharges or Medicare share" (pg. 5-27). The committee's recommendation clearly would have the greatest negative impact on those hospitals that treat the most Medicare patients by shifting funding away from these facilities in the interest of bolstering support to non-Medicare serving entities. Congress consistently and clearly has stated—as recently as in report language for the Affordable Care Act (ACA, P.L. 111-148 and P.L. 111-152) —that Medicare GME funding should be directed to entities that care for substantial proportions of Medicare beneficiaries [#7].

Figure 2: Projected Impact of Committee's Proposal on Medicare-serving Hospitals

Medicare Share Quintile	**Impact of IME reduction**	**Impact of other changes**
Overall	-34%	0%
<36.2	-35%	31%
36.2 - 44.6 percent	-34%	-5%
44.6 - 51.3 percent	-33%	-13%
51.3 - 58.1	-33%	-17%
>= 58.1	-32%	-22%
Medicare Discharge Quintile	**Impact of IME reduction**	**Impact of other changes**
Overall	-34%	0%
<1,941 discharges	-31%	58%
1,941--3,558 discharges	-31%	23%
3,559--5,169 discharges	-33%	0%
5,170--7,684 discharges	-34%	1%
>7,684 discharges	-34%	-10%

Source: Recreation of report's Table F-3 (pg. F-5)

The AAMC is concerned that the committee recommends diluting Medicare funding in an era of increasingly limited resources, rather than recommending alternative, supplemental sources to remedy the funding challenges that non-Medicare-serving settings face in their training efforts. The association strongly supports funding for CHGME, Title VII health professions, and other programs that were designed to address training efforts that do not fit within the Medicare program. For example, the committee opts not to recommend changes to financing the VA or Department of Defense training programs (pg. 5-1). In doing so, the committee appropriately recognizes the important role the programs play in serving these specific populations and, accordingly, that they require a dedicated funding stream outside of Medicare.

Similarly, other settings and populations could benefit from financing mechanisms that reflect the unique circumstances and needs associated with GME at these locations. The AAMC acknowledges the shortcomings inherent in some existing non-Medicare physician training policies, namely the absence of the steady, reliable funding necessary to operate high-quality, multiyear residency programs. We object, however, that the solution to such deficiencies is to repurpose Medicare funds as a substitute for investments that other payers should but do not currently make. In recommending that policymakers redirect these limited Medicare resources away from Medicare beneficiaries to support non-Medicare-serving settings, the committee instead misses an opportunity to propose a strategy that would suit these community-based settings. For example, many of these settings serve high numbers of Medicaid patients, but the committee does not explore strategies to ensure Medicaid GME support. The committee also neglects to mention important changes included in Sec. 5504 of the ACA to help promote the time that residents spend in non-hospital settings, which we discuss further in Section 3 of these comments.

2

SUSTAINING SUPPORT FOR VITAL PATIENT CARE SERVICES OFFERED PRIMARILY AT MAJOR TEACHING HOSPITALS

Summary of this Section:

- The AAMC agrees that direct graduate medical education (DGME) is underfunded, a consequence of outdated Medicare methodologies that underpay teaching hospitals for training and the absence of other payers explicitly contributing their share of training costs. However, the remedy for this shortcoming should not come at the expense of patients and patient care.
- Disregarding the congressional intent for the indirect medical education (IME) patient care payment and using it for a new purpose would have major implications for patients that seek stand-by and other unique regional services at AAMC-member teaching hospitals.
    - The committee's characterization of congressional intent for establishing IME is incomplete in that it neglects to fully acknowledge the role of IME payments in supporting "specialized services and treatment programs" offered almost exclusively at teaching hospitals.
    - For example, major teaching hospitals operate 79 percent of Level 1 trauma centers, specially equipped and staffed facilities that provide the highest level of trauma care, often to an entire region, at significant expense to the institution. IME payments are meant to partially offset these costs.
- Because the committee would freeze overall Medicare GME support, make only a portion of it available for programs, and increase eligibility to non-Medicare providers, the net effect for many existing residency programs likely would be negative.
- According to the committee's projections, their proposal would result in steep, immediate cuts to existing programs, with the greatest losses at teaching hospitals with the greatest number of FTE residents and the greatest number of Medicare discharges.
    - The consequences of the proposal likely would extend beyond the clinical mission to the education and research missions of academic medicine as well.
    - Unintended consequences could include reduced financial support from hospitals to medical schools, a reduction in current residency positions, and/or a negative economic impact on the community.
- Additional investments in non-Medicare residency training facilities should supplement, not replace, existing support for physician training and patient care.

A second distinction between GME payments to hospitals and other settings is eligibility for Medicare IME payments. Medicare IME constitutes a *patient care* payment designed to partially offset the unique costs associated with caring for highly complex, severely ill inpatients at teaching hospitals. Unlike DGME payments, IME payments are provided as add-on payments for patient care services on a per-Medicare-beneficiary-discharge basis. Thus, IME payments attempt to remedy a flaw in the diagnosis-related group (DRG)-based prospective payment system (PPS), which does not capture these unique additional expenses teaching hospitals incur by providing round-the-clock access to highly specialized and costly patient care resources in a wide range of services. While other entities may treat challenging patient populations, they do not provide the level of complex care provided by teaching hospitals, and their Medicare and Medicaid reimbursement often is cost-based; consequently, they do not suffer the payment shortfalls that IME is intended to resolve.

Congressional Intent for IME Payments

As quoted by the committee (pg. 4-4), this congressional intent for IME payments is clearly stated in House and Senate report language from when Congress explicitly created the adjustment for teaching hospitals as part of Medicare's DRG-based PPS:

> This adjustment is provided in light of doubts … about the ability of the DRG case classification system to account fully for factors such as severity of illness of patients requiring the specialized services and treatment programs provided by teaching institutions and the additional costs associated with the teaching of residents … The adjustment for indirect medical education costs is only a proxy to account for a number of factors which may legitimately increase costs in teaching hospitals. [#8, #9]

Despite including this language, the IOM committee's discussion of the IME payment almost exclusively is limited to the role of IME in "compensat[ing] for the inefficiencies thought to be associated with sponsoring residency programs" (pg. 5-7). The committee lists examples of some of these inefficiencies on pg. 3-30, and asserts, "Non-hospital teaching sites may well be faced with the types of additional training-related experiences that IME was created to address, but are not eligible for these payments since they don't receive DRG payments," going on to characterize the system as a "financial disincentive toward non-hospital training" (pg. 3-13).

Except for a brief mention that "some argue that the calculation of the indirect costs of teaching [also] should consider … the costs of providing an array of expensive, high-tech, and complex services not available elsewhere (e.g., specialized burn and transplant units)" (pg. 3-30), the committee neglects to explore the role of these services uniquely offered at teaching hospitals in establishing the IME payment. The report dismisses the explicit inclusion of such costs in the congressional justification that the committee itself cites ("specialized services and treatment programs provided by teaching institutions"), noting only that "others question whether such costs should be subsidized by federal GME programs" because "the costs are not part of the education process and paying for them, in this way, may encourage inefficiencies … and some non-teaching hospitals provide comparable services" (pg. 3-30). Instead, the report asserts that the "committee could not find a justification for continuing the separate [DGME and IME] funding streams," recommending to effectively eliminate the IME payment and redirect it to a uniform, national per resident amount (PRA) for any training entity (pg. 5-8).

Disregarding the congressional intent for the IME payment and using it for a new purpose would have major implications for the patients that seek stand-by and other unique regional services at AAMC-member teaching hospitals. Though they represent only 5 percent of all hospitals, these hospitals operate 79 percent of Level 1 adult trauma centers [#10], 68 percent of all burn care units, and 59 percent of pediatric-intensive care units (PICUs) [#11]. Additionally, 87 percent of all lung transplant programs, 85 percent of all liver transplant programs, 78 percent of all heart transplant programs, and 68 percent of all bone marrow transplant programs are based at an AAMC-member teaching hospital [#11]. One-fifth of all services in cardiac surgery and 30 percent of cardiac intensive care beds are based at these hospitals [#11]. Compared with

physician offices and other hospitals, major teaching hospitals care for patients that are sicker, poorer, and more likely to be disabled or non-white [#12].

As exhibited in Figure 3, other settings that participate in residency training typically do not invest in clinical services in the same way as major teaching hospitals do, which explains why such facilities are not eligible for IME payments.

Figure 3: Sample of Mission-related Patient Care Services Supported by the IME Payment Across Select Settings and Corresponding IME Eligibility

Mission-related Patient Care and Community Services	COTH Teaching Hospitals	Federally Qualified Health Centers (FQHCs)	Other Ambulatory Settings
Lung Transplant Programs?	✓ (87%)	X	X
Liver Transplant Programs?	✓ (85%)	X	X
Heart Transplant Programs?	✓ (78%)	X	X
Level 1 Trauma Centers?	✓ (79%)	X	X
Bone Marrow Transplant Programs?	✓ (68%)	X	X
Burn Units?	✓ (68%)	X	X
Joint Commission Advanced Certification Comprehensive Stroke Centers?	✓ (74%)	X	X
Pediatric ICUs?	✓ (59%)	X	X
24/7 Stand-by Services for Critically Ill or Injured Patients?	✓	X	X
Equipped and Staffed to Accept Transfers of Complex, Medically Vulnerable Patients?	✓	X	X
Incur Additional Costs Related to the Above Services?	✓	X	X
Eligible for IME Payments?	**YES**	**NO**	**NO**

In contrast to the committee's characterization of IME, in its most recent report, the federal Council on Graduate Medical Education (COGME) maintains,

> The IOM Committee draws on past analyses finding that much of IME is not devoted to training and could be cut without harming the programs. However, COGME believes that IME funding helps support programs and activities that serve an important public health need. These funds may be inextricable from the maintenance of training programs. An across-the-board reduction in these amounts would significantly disadvantage patients and communities as well [as] GME trainees by reducing access to much-needed medical specialty care, particularly in disadvantaged and underserved communities [#13].

Example of What the IME Payment Supports: The Highest Levels of Trauma Care

Many unique regional resources provided by teaching hospitals constitute a vital public good, but also one that carries heavy expenses that the institutions often must absorb [#14], perhaps explaining why other facilities cannot and do not offer those services. Consider, for example, the requirements associated with Level 1 trauma center designation, which is granted only to specially equipped and staffed facilities that provide the highest level of trauma care.

Because it is impossible to predict when and what emergencies will occur, they must ensure round-the-clock, immediate on-site access to a full team of surgical and other specialists, lab and radiological staff, and other providers. They must be equipped to treat at a moment's notice a full spectrum of injuries and accept transfers from other settings that only can provide initial care. They must participate in regional trauma system planning and operation, support prevention activities like public education, and maintain research programs that continually improve trauma care. Another requirement of Level 1 designation is to operate a residency program to prepare future generations of trauma specialists, a recognition that the educational experience for physicians is enhanced by training in such settings.

With such extensive requirements, major teaching hospitals are well-suited to serve the nation's highest level trauma care needs. These specialized capabilities are critical in an emergency—according to the Centers for Disease Control and Prevention (CDC), severely injured patients who receive care at a Level 1 trauma center have a 25 percent better chance of survival than those who receive care elsewhere [#15]—but carry a hefty price tag even when they are not in use. According to a 2004 study, the annual median cost of "readiness" for each trauma center in one state was approximately $2.7 million [#16]. A 2008 report by the health department in another state estimated that the state's trauma centers lose more than $58 million annually, including losses of approximately $30 million due to readiness costs alone [#17].

It is not always possible for the institutions to recover these stand-by and preparedness costs. According to information reported in the 2012 National Trauma Data Bank, Medicare is the primary payment source for trauma care [#18]. But traditional billing mechanisms do not always capture the additional costs the facilities incur, and high percentages of uninsured and underinsured individuals can drive financial losses for an already costly endeavor. Moreover, federal funding for trauma programs was discontinued nearly a decade ago, few states provide direct support for trauma systems [#19], and those states that do have such a mechanism

typically cover only a small fraction of the hospitals' losses [#17]. This history demonstrates that even dedicated funding for maintaining such endeavors can be unreliable.

According to a 2009 study, 339 trauma centers nationwide closed between 1990 and 2005, primarily due to increasing financial pressures on the institutions [#20]. Major teaching hospitals historically have maintained trauma centers as part of their commitment to the sickest or most vulnerable members of our communities. However, the 2009 study also suggests that the loss of payment adjustments such as Medicare's IME payments may further increase the risk of trauma center closures.

IME payments are meant to partially offset these costs—not only for trauma, but also for the diverse range of other highly specialized services offered almost exclusively at teaching hospitals that bear their expense. Contrary to the report's suggestion otherwise (e.g., pg. 3-30), there are no federal payment sources that explicitly support these important services for the community [#14]. While some commentators may debate the extent to which they qualify as a "public good" in strict economic terms, there is no denying that ensuring universal access to trauma centers, burn units, and other vital services constitutes a societal good.

IME-supported Institutions Enhance the Nation's Capacity to Respond to Emerging Threats
Recent headlines illustrate how the infrastructure afforded by these well-established referral patterns can strengthen the ability of the health care system to respond expeditiously to novel threats too. For over a decade, Emory University and University of Nebraska Medical Center (UNMC) have been maintaining specially built isolation units to treat patients with serious infectious diseases—two of only three ready units in the country. Until this past summer, no patient had required the highly specialized capabilities of the units, but the institutions had invested substantially to conduct regular training exercises and maintain constant readiness, despite losing funding from other sources.

After treating the first Ebola patients in the United States, both facilities made it a priority to share the knowledge they gained through the experiences such that it could be accessed by other hospitals in the United States and health professionals globally. With no scientifically verified treatment for the disease, U.S. patients have been receiving a range of experimental therapies, adding an additional element of complexity to their care that academic medical centers are uniquely qualified to manage [#21]. As institutions guided by a commitment to medical research and discovery, Emory and UNMC were able to navigate the intricacies associated with untested therapeutics, institute research protocols, and advance the care of patients. Their efforts serve not only to benefit the patients at hand but also to better inform efforts to treat the Ebola virus disease worldwide.

Emory and UNMC also worked closely with state and federal health officials to help coordinate the government's response. When it became clear that treating Ebola required unique and extensive preparations beyond standard hospital readiness, the institutions advised the CDC as the agency worked with other hospitals to prepare. As a result of their experience in caring for the most complex patients (e.g., trauma, burn, etc.) and in administering research protocols, major teaching hospitals were able to gear up immediately. Of the 48 treatment facilities named as of December 31, 2014, by CDC [#22], 44 are AAMC-member institutions. Their preparations

for Ebola patients not only will strengthen the nation's response to other emerging threats, it also will yield real-time lessons on improving infection control within hospitals. While recently enacted emergency supplemental funding may help cover some of the immediate expenses these hospitals will incur, sustaining that level of heightened preparedness over the long term will require an institutional financial commitment that will persist long after supplemental sources have been exhausted.

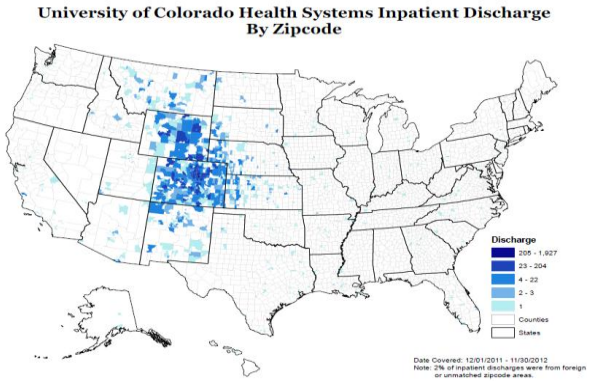
Major teaching hospitals house expertise and equipment inaccessible elsewhere. Their specialized capabilities may vary from institution to institution, but their common commitment to research, education, and patient care enables this network of academic centers to replicate and scale up such capabilities more rapidly than other facilities, as necessary. This capacity serves as an asset not only in times of unexpected public health emergencies, but also in addressing the personal health emergencies that communities encounter daily. It also carries a heavy expense for the institution that IME payments are designed to offset [#23]. In this way, the IME payment partially offsets the costs of offering irreplaceable patient care services to the community; this relief enables the institution to continue supporting the costly research and education missions that, in turn, inform and strengthen the facility's clinical prowess [#14].

Consolidating the DGME and IME payments, as the committee suggests, risks forfeiting the targeted and separate focus that each of these funding streams was intended to address. The committee's proposal would jeopardize communities' access to this lifesaving care by effectively eliminating such payments without proposing an alternative methodology to sustain these specialized services.

The Loss of Patient Care Services Supported by IME Payments Would Have a Regional Impact

It also is important to note that the specialized care supported in part by IME payments extends far beyond the locale of the recipient institution. In many cases, major teaching hospitals are regional referral centers that provide irreplaceable lifesaving services not found in surrounding states. Consider, for example, inpatient discharges for the University of Colorado Health Systems. As depicted in the map in Figure 4, patients across the state of Wyoming, regions of Montana, New Mexico, and several other states beyond Colorado rely on services offered by the University of Colorado Health Systems [#24].

Figure 4: Regional Impact of Services Offered by One AAMC Member



Source: Patient discharges by Colorado area zip codes as provided to AAMC in September 2013

Consequences of Freezing and Diluting Overall Medicare Investment in GME

The report calls on Congress to freeze overall Medicare GME funding at the "current aggregate amount (i.e., the total of indirect medical education and direct medical education expenditures in an agreed-on base year, adjusted annually for inflation)" (pgs. S-9 and 5-13). The report is explicit in stating, "No additional public funds should be used" (pgs. S-9 and 5-14).

The committee's proposal then splits this existing funding into a "GME Operational Fund" and a "GME Transformational Fund." The bulk of the existing funding would be directed to the GME Operational Fund, which would be expected initially to support not only all current Medicare-funded residency programs, but also additional positions at freestanding children's hospitals, teaching health centers (THCs), and other entities that currently may not be receiving Medicare funding. Support would be provided through a new PRA. The report specifies, "Residents in freestanding children's hospitals and THCs should receive the same PRA (with supplemental funds from the Transformation Fund)," irrespective of the facilities' Medicare caseload (pg. 5-26).

In other words, only a portion of existing funding would be used to fund all existing programs plus others. Thus, while the committee proposes that the "current freeze on funded slots should be eliminated" at the institutional level (pg. 5-26)—theoretically enabling an institution to increase its training efforts—the net effect for many existing training programs likely would be negative, because of the proposed cap on overall Medicare support and increased eligibility of non-Medicare providers to existing funds. Curiously, the report recommends automatic eligibility of THCs for Medicare operational funding, despite also observing that a comprehensive evaluation of this ACA-established program has not yet been completed: "It is too soon to know if training in these sites will ameliorate some of the readiness issues and evaluation of these outcomes is important" (pg. 2-12).

To enable "a more equitable distribution of GME funds," the committee proposes establishing a national PRA, "calculated with a simple division of the operational funds by the total number of current Medicare-funded training slots (in the agreed-on base year)," with a geographic adjustment (pg. 5-25). The committee does not address, however, how to achieve an "equitable" distribution of funding for those residency programs that inherently are more expensive to maintain (such as those in highly specialized clinical settings). As the committee notes, Congress has taken several actions over the years to reduce variation in DGME (pgs. 3-7 – 3-9). Though some outliers still exist, it is not clear why the committee would propose to rebase to a national average when hospitals have variable costs. To better reflect the true costs of DGME, Congress instead could consider instructing CMS to rebase a hospital's DGME payment on the basis of its most recent cost report.

Under the committee's plan, the remainder of existing Medicare GME funding would be redirected to a "Transformation Fund" that would support two new federal entities within the Department of Health and Human Services: a GME Policy Council in the Office of the Secretary and a GME Center within CMS. The committee recognizes several other federal entities that could (or may already) be tasked with the responsibilities assigned to these new governmental entities: the Council on Graduate Medical Education (COGME), the Medicare Payment

Advisory Commission (MedPAC), and the National Health Care Workforce Commission, for example (pgs. 4-5, 4-6, 4-16, 5-10, 5-14, and 5-16).

Unlike MedPAC and the Workforce Commission (which were established to be independent entities with members appointed by the Government Accountability Office), the two new governmental entities would be an arm of the administration, with the Secretary of Health and Human Services appointing members to the GME Policy Council for six-year terms. The committee directs that the majority of appointees be "non-stakeholders" (pg. 5-17), conceivably leading to a council that would lack sufficient expertise about GME, with singular authority over advising and implementing physician workforce training policy (the report is not clear as to the extent the Policy Council would be able to implement its recommendations and whether it would have the authority to bypass Congress).

The report rejects the pre-existing advisory bodies for a number of reasons. For example, it describes COGME as "grossly underfunded" (pg. 5-10), while the committee anticipates that MedPAC, despite its $11.5 million budget, is unlikely to dedicate significant resources to the subject given that GME accounts for only 2 percent of the overall Medicare budget (pg. 5-17). (Interestingly, applying the GME proportion of overall Medicare funding to the MedPAC budget would suggest $230,000 as the proportionately appropriate federal investment for such activities, $88,000 less than COGME's $318,000 FY 2012 budget indicated on page 4-5 of the report.) As a result, the committee recommends that Congress redirect already scarce Medicare funding currently being used for physician training and patient care for the most medically vulnerable to establish these two new governmental bodies. Yet, it is unclear how the two proposed new entities would be better equipped to reach consensus on those issues the committee did not address in its report—particularly because the committee was not restricted in the same ways federal advisory and operational bodies would be.

The Transformation Fund also would be expected to support pilot projects on physician (and potentially other health professions) training, among other activities. In its recent report, COGME acknowledged the value of "investment in innovation, research, and workforce analysis," but also noted that "COGME questions the wisdom of diverting significant amounts of present educational funds to support these activities" [#13]. Like COGME, while the AAMC appreciates the IOM committee's interest in exploring novel approaches to establishing and financing physician training efforts, we question the advisability of pursuing such experimentation at the expense of the existing infrastructure. To be maximally effective, proposals should supplement existing support, at least until their feasibility, quality, and effectiveness can be ensured. Any efforts to repurpose already limited resources for health care education and training only would be counterproductive in addressing persistent workforce shortages and patient care needs.

Shifting Medicare GME Funding to the Program Sponsor Regardless of the Entity Bearing the Cost

Another of the committee's proposals would restructure payments such that "Medicare GME funds will flow to program sponsors based on their total number of Medicare-funded slots instead of to teaching hospitals based on the time residents spend at their institutions and on Medicare inpatient discharges" (pg. 5-25). The committee also presumes, "This change in funds

flow will have little impact on the many teaching hospitals that already sponsor residency programs, but it will have a major impact on teaching hospitals hosting residents sponsored by another institution" (pg. 5-25). Given the prevalence of resident rotations from multiple sponsoring institutions, the committee may be underestimating the complexity associated with this proposal even for hospitals that are the sponsors of residency programs.

Similarly, the logistical challenges associated with transitioning from a system that is Medicare volume/time-based to a system that is sponsorship-based also are understated in the committee's report. Consider, for example, a medical school that sponsors 100 residents. If 50 residents currently train at Hospital A, which has a Medicare cap of 40 FTEs and does not train any other resident from any other programs, the process of moving funding for all 40 FTE slots over to the medical school would be relatively straightforward. But such a simple scenario is not typical. If the other 50 residents train at Hospital B, which has a Medicare cap of 500 FTEs but trains 700 FTE residents from programs run by five different sponsors, it is easy to see how navigating such a transition would quickly become very complicated.

It also should be noted that the committee's rationale for proposing such a change is inconsistent with the information presented elsewhere in the report. The report speculates that hospitals' fiduciary control over GME funds "creates a disincentive to training in non-hospital settings" (pg. 3-1), and that by "giving the funds directly to teaching hospitals, the payment system discourages physician training in the clinical settings outside the hospital where most people seek care" (pg. 3-33). Accordingly, on page 5-8, the committee describes its expectation that "[t]ransferring fiduciary control to all sponsoring institutions increased [*sic*] the likelihood that GME funds will flow to and increase training in non-hospital settings." Yet, earlier in the report, the committee cites data indicating that in academic year 2012–2013, "[c]ommunity hospitals and ambulatory care settings sponsored less than 1.0 percent of residency programs and residents" (pg. 3-13). As described in Section 3 of these comments, other existing policies (such as the provisions enacted under Sec. 5504 of the ACA) may be more effective tools for realizing the committee's objective.

Consequences of GME Cuts for Academic Medicine

Table F-1 of the committee's report (pg. F-2) presents an example of "phasing in" the committee's proposal by imposing a reduction to IME payments each year until total IME funding is halved to $3.4 billion in the fifth year. Of utmost concern is the committee's recommendation to eliminate the IME payment entirely (in favor of a single training payment), thereby terminating current support for patient care services that typically are unavailable elsewhere. Figure 5 applies the committee's sample approach in its fifth year to COTH teaching hospitals to illustrate the impact of the proposal on existing teaching programs. As seen in the table, in general, COTH hospitals would experience significant cuts, and teaching hospitals with the greatest number of FTE residents and the greatest number of Medicare discharges would experience the greatest losses, up to 43 percent.

The consequences of the committee's recommendations likely would extend beyond just the clinical mission to the education and research missions of academic medicine as well. Without IME support for the costly clinical services they maintain, teaching hospitals would be forced to reevaluate their ability to continue subsidizing additional (and costly) education and research

programs. These assessments could result in the need to reduce hospital support for medical education and/or research at the nation's medical schools for the hospital to continue offering otherwise inaccessible clinical services to the community.

Figure 5: Estimated Impact of Committee's Recommendations on COTH Hospitals

	Number of Hospitals	**Average Impact per Hospital** (millions)	**% Impact**	**Medicare Margin,** FY 2012	**Medicare Margin,** Committee's Proposal	**Patient Care Margin,** FY 2012	**Patient Care Margin,** Committee's Proposal
COTH (General Acute) Hospitals	249	$ (9.79)	-34%	-6.6%	-12.2%	-5.1%	-6.3%
Number of Residents (FTE)							
<500	211	$ (7.54)	-34%	-7.2%	-12.2%	-4.1%	-5.2%
500 or more	38	$ (22.23)	-33%	-5.0%	-12.0%	-7.4%	-8.9%
Medicare Discharge (Including Medicare HMO)							
<8,000 discharges	119	$ (1.75)	-10%	-6.2%	-7.9%	-10.4%	-10.8%
8,000 or more discharges	130	$ (17.14)	-43%	-6.7%	-13.8%	-2.6%	-4.3%

Source: AAMC's replication of committee's proposal based on methodologies specified in Appendix E and using 2011 cost report data. Margin data is provided by Vaida Health Data Consultants.

Another unintended consequence of an IME cut could be a reduction in current residency positions, leading to a subsequent drop in the number of new physicians. For example, a recently published study found that under prolonged payment reductions, hospitals respond by reducing operating expenses, including personnel and medical residents [#25]. The study evaluated Medicare payments broadly, but proposals to target GME payments specifically could have an even more pronounced effect on the training mission. According to the results of an August 2013 ACGME survey of GME program directors, 83 percent of respondents (from both teaching hospitals and medical schools) already are engaged in leadership-level discussions about how they would reduce residency positions if Medicare GME support were reduced [#26]. The survey posed three scenarios under which Medicare funding for GME could be reduced, and respondents reported that additional financial pressures would trigger program reductions/eliminations across training programs in both primary and specialty care. Not surprisingly, the greater the proposed GME cut, the greater the likelihood of closure, ranging up to 75 percent of programs expecting to close or cut the current number of residency positions.

These sobering forecasts underscore the critical importance of preserving and augmenting the federal GME investment and enabling teaching hospitals to continue preparing the next generation of physicians to meet the country's growing health care needs. The report notes that some institutions have self-funded residency positions over their caps; however, as described above, their ability to continue incurring such expenses likely will diminish as financial pressures increase from marketplace competition as well as significant Medicare and Medicaid payment changes for hospitals resulting from the ACA. Additionally, dismantling Medicare's institutional support for physician training would undermine the ability of academic medicine to maintain the

infrastructure necessary to continue conducting high-quality residency training programs, particularly for specialties requiring substantial institutional investments.

Proposals to substantially reduce GME support to teaching hospitals threaten not only to undermine the nation's physician training and patient care capacity at a most inopportune time given shortage projections, but also carry unsettling economic implications for local communities and states as well. According to a 2011 analysis, for every $1.00 the federal government cuts in IME payments, the hospital's state economy is estimated to lose $3.84 [#27]. For example, a 20 percent IME cut to just the largest teaching hospitals in the following states would result in statewide economic losses as described below:

- Georgia would lose nearly $52 million;
- Ohio would lose nearly $165 million;
- Michigan would lose nearly $167 million;
- North Carolina would lose nearly $94 million;
- Florida would lose nearly $78 million; and
- Texas would lose nearly $103 million.

These losses would result from major reductions in both direct and indirect business volume generated by the institutions, such as institutional spending, employee spending, and spending by visitors. Nationwide, the overall negative economic impact would total nearly $3.3 billion, including a loss of nearly 22,000 jobs and $196 million in state and local tax revenue. The implications of such losses for a community should not be underestimated.

"Phased" Implementation Would Still Yield Steep, Immediate Cuts to Training Programs

The committee acknowledges the "disruptive" nature of its proposals (pgs. S-8, 5-11, and 5-23), observing, "Sudden changes in cash flow for teaching institutions could undermine their capacity to prepare for the new GME financing system and could negatively impact their other essential missions" (pg. 5-11). Yet, it is not clear how the committee reconciles its statements on the need to "mitigate" these risks (pgs. 1-11, 5-11, and 5-12), with its own projections that "[i]n the first year, a 14 percent IME reduction would be needed" to implement the report's recommendations, followed by subsequent reductions in the following years (pg. F-1).

Likewise, the committee does not provide a strategy to fill the resulting deficit of physicians and/or recover the otherwise inaccessible, lifesaving services in communities across the country that could disappear if, after 10 years of experimenting with the nation's physician training enterprise, the committee's hopes of an idealized health care system have not been realized. While bolstering financial support to community training facilities may be a goal worth pursuing, achieving that goal by diverting Medicare IME payments away from patient care services and by shifting Medicare physician training support to non-Medicare-serving entities would be counterproductive. Additional investments in ambulatory facilities should be supplemental to, not at the expense of the services that sustain the sickest, most vulnerable patients.

3

ADDRESSING GEOGRAPHIC DISTRIBUTION

Summary of this Section:

- While legislation is not required to enable rural and other non-teaching hospitals to establish new residency programs, there is a clear need to improve distribution of the physician workforce. Additional efforts to address this issue should be informed by existing graduate medical education (GME) policies designed to facilitate such efforts.
    - Medicare "caps" for rural hospitals were set at 130 percent of their 1996 levels, leaving them room to grow, and rural hospitals currently can expand their cap for the purposes of adding new medical residency programs.
    - Similarly, Medicare caps do not apply to critical access hospitals.
    - A non-teaching hospital can become a new teaching hospital and establish its own resident cap to be reimbursed by Medicare for Medicare's share of the hospital's training costs.
    - The Medicare Rural Training Track program offers mutually beneficial incentives to both urban and rural settings to pursue partnerships for primary care residency training.
- Becoming a teaching hospital requires a sustainable administrative and financial commitment that the majority of hospitals are not willing or able to make. Though legislation is not necessarily required to enable non-teaching hospitals to receive Medicare GME support, providing such institutions start-up assistance initially may make it more appealing for such facilities to administer training programs.
- Community-based training is common among existing programs, and, where appropriate, educators continue to pursue opportunities to strengthen community partnerships.
    - According to Accreditation Council for Graduate Medical Education (ACGME) data, 93 percent of pipeline programs in both primary and non-primary care specialties place residents in non-hospital and ambulatory settings for portions of training.
    - The committee omits enacted and proposed legislative remedies to promote training in community-based settings, such as provisions in Section 5504 of the Affordable Care Act (ACA), in proposed GME expansion legislation, and other areas.
    - Obstacles to bolstering such collaborations extend beyond financing. For example, a federal advisory body recently described challenges in recruiting physician faculty, who may feel inexperienced in "teaching methodologies to assure quality educational outcomes."
- Balancing a resident's community-based experiences with training in the inpatient setting enables the physician to develop competence across the spectrum of illness from prevention to cures.

The committee's observations regarding the geographic concentration of physician training funding are incomplete. As described in Section 1 of these comments, the report implies that facilities located in rural communities are disadvantaged by the current GME financing structure, when, in fact, it could be argued that current policies explicitly *incentivize* residency training programs at these facilities. Critical access hospitals (CAHs) that train residents are reimbursed at 101 percent of their reasonable costs, while other teaching hospitals receive formula-based payments that cover a small fraction of the institution's actual direct costs.

Existing Opportunities to Expand Training to Geographic Areas with Few Training Programs
The report also repeatedly asserts, "Medicare-supported training slots are frozen where they existed a decade ago, perpetuating inequities in the geographic distribution of training slots and ignoring changes in the geography and demography of the U.S. population" (pg. 3-1). Similar statements appear on pages 2-14, 3-11, and 3-34. The committee appears to be under the impression that legislation is required to enable non-teaching and rural hospitals to establish new residency programs.

Unlike other teaching hospitals for which Medicare support has been limited at 1996 levels since 1997, the "caps" for rural hospitals were set at 130 percent of their 1996 levels, leaving them significant room to grow their training programs [#28]. The Medicare program also allows rural hospitals to expand their cap for the purposes of adding new medical residency programs [#29, #30]. In other words, a rural hospital can add a new residency training program at any time and receive additional Medicare support for the new trainees, while Medicare support for other hospitals is bound by the caps established nearly two decades ago. Similarly, Medicare caps do not apply to CAHs; these hospitals can expand existing programs or add new programs without limit and will continue to receive Medicare support for 101 percent of their costs.

It also should be noted that any hospital can become a teaching hospital. Nationwide, only 17.7 percent of hospitals choose to become teaching hospitals, and major teaching hospitals represent only 5 percent of all hospitals [#31]. As a service to the broader community and as part of our ongoing efforts to ensure a sufficient physician workforce to meet the country's increasing health care needs, the AAMC has published and continues to update a guide on the Medicare requirements for *Becoming A New Teaching Hospital* [#32]. AAMC staff regularly work with hospitals that are considering becoming new teaching hospitals and medical schools seeking to develop educational partnerships with non-teaching hospitals. As reflected in Figure 6, under current law, there is in fact greater opportunity for hospitals in Western states, such as Utah, Wyoming, and Montana, to expand because fewer hospitals already have chosen to establish training programs compared to Northeastern states such as New York or Massachusetts.

The committee mentions both of these opportunities for rural hospitals and non-teaching hospitals anywhere in the country to establish residency programs and receive Medicare support (pg. 3-12). However, the committee opts to conclude that as a result of the caps, "the geographic distribution of Medicare-supported residencies was essentially frozen in place," noting "Medicare-supported slots are most highly concentrated in the Northeastern states, as is most of Medicare GME funding" (pg. 3-11). The committee's assessment of the absence of training programs in some communities outside the Northeast is limited in that it does not address that hospitals in those communities, in fact, have the option to become a teaching hospital but decide against it.

For example, the report cites a study that sought to assess the impact on rural communities of a 2003 redistribution of 3,000 unused Medicare-funded slots (pg. 3-12). Besides characterizing expanded training in rural areas as "the top priority" of the redistribution (rural training was one of the priorities for receiving redistributed slots, but priority also was given to specialty training programs that do not exist elsewhere in the state), the report states, "Less than 3 percent of the

Figure 6: Teaching Hospitals as a Percentage of All Hospitals by State, FY 2012

	Count of All Hospitals	Teaching	% Teaching in State	Major Teaching	% Major Teaching in State
Alabama	130	16	12.3%	3	2.3%
Alaska	25	1	4.0%	0	0.0%
Arizona	110	15	13.6%	4	3.6%
Arkansas	101	13	12.9%	1	1.0%
California	421	105	24.9%	21	5.0%
Colorado	97	18	18.6%	2	2.1%
Connecticut	42	17	40.5%	8	19.0%
Delaware	12	2	16.7%	0	0.0%
Washington, D.C.	13	7	53.8%	4	30.8%
Florida	252	50	19.8%	7	2.8%
Georgia	177	17	9.6%	3	1.7%
Guam	1	0	0.0%	0	0.0%
Hawaii	26	5	19.2%	0	0.0%
Idaho	50	4	8.0%	0	0.0%
Illinois	210	57	27.1%	17	8.1%
Indiana	173	24	13.9%	3	1.7%
Iowa	122	17	13.9%	2	1.6%
Kansas	155	8	5.2%	1	0.6%
Kentucky	115	14	12.2%	2	1.7%
Louisiana	230	25	10.9%	7	3.0%
Maine	41	4	9.8%	1	2.4%
Maryland	63	15	23.8%	5	7.9%
Massachusetts	108	32	29.6%	15	13.9%
Michigan	171	52	30.4%	26	15.2%
Minnesota	146	19	13.0%	5	3.4%
Mississippi	115	4	3.5%	1	0.9%
Missouri	153	27	17.6%	8	5.2%
Montana	64	2	3.1%	0	0.0%
Nebraska	96	9	9.4%	2	2.1%
Nevada	52	5	9.6%	1	1.9%
New Hampshire	30	3	10.0%	1	3.3%
New Jersey	98	42	42.9%	13	13.3%
New Mexico	54	7	13.0%	1	1.9%
New York	219	94	42.9%	55	25.1%
North Carolina	135	17	12.6%	3	2.2%
North Dakota	49	5	10.2%	0	0.0%
Ohio	234	63	26.9%	19	8.1%
Oklahoma	153	14	9.2%	3	2.0%
Oregon	63	10	15.9%	3	4.8%
Pennsylvania	238	68	28.6%	21	8.8%
Puerto Rico	60	12	20.0%	4	6.7%
Rhode Island	15	6	40.0%	4	26.7%
South Carolina	85	13	15.3%	1	1.2%
South Dakota	62	3	4.8%	0	0.0%
Tennessee	147	15	10.2%	5	3.4%
Texas	602	59	9.8%	12	2.0%
Utah	56	7	12.5%	1	1.8%
Vermont	15	1	6.7%	1	6.7%
Virgin Islands	2	0	0.0%	0	0.0%
Virginia	114	24	21.1%	3	2.6%
Washington	101	19	18.8%	3	3.0%
West Virginia	62	11	17.7%	1	1.6%
Wisconsin	145	23	15.9%	2	1.4%
Wyoming	30	2	6.7%	0	0.0%
All	6,240	1,102	17.7%	305	4.9%

Source: AAMC analysis of Medicare cost report data, using FY 2013/FY 2012/FY 2011 data (July 2014 release) and AAMC membership data
Note: The count of hospitals includes all hospitals who submitted a Medicare Cost Report for FY 2013, FY 2012, or FY 2011. Teaching was defined as having an intern-to-resident bed (IRB) ratio greater than zero as determined by the IRB on E Part A. Major teaching was defined as having an IRB ratio greater than or equal to 0.25 as determined by the IRB on E Part A.

redistributed positions were in rural areas and, of the 304 hospitals given additional slots, only 12 were rural institutions" (pg. 3-12).

The committee may be unaware that (a) only 19 rural hospitals applied for slots [#33]; and that (b) most rural hospitals likely did not need to participate in the redistribution because they are able to expand their caps by developing new programs any time they so choose (as described above). Rural hospitals actually fared better than urban hospitals in the slot-award process, with 63.2 percent of rural applicants receiving slots compared to 57.2 percent of urban applicants [#33]. Instead of accounting for these factors, the committee implies that Congress needs to overhaul the payment methodology to remedy the perceived geographic imbalance, presumably by redirecting funding from other communities that have invested in physician workforce development (pg. 2-14).

As described above, current policy already favors expansion in rural areas. A more inclusive analysis likely would have demonstrated that the added costs associated with being a teaching hospital, and the ongoing administrative burden of operating a high-quality training program, make the task daunting for any institution, even with additional financial incentives like the ones currently available. For rural communities—which, as the committee mentions, struggle to attract and retain physicians for a number of reasons (pg. 2-14)—the task may be even more challenging. Aside from questions of securing the appropriate infrastructure for maintaining such a program over the long term, including sufficient supervisory faculty and equipment, it is not clear whether the volume and diversity of patient cases in such settings would offer ample opportunities to ensure a high-quality, well-rounded educational experience. To ensure the workforce is best prepared to respond to the nation's health needs, it is important to recognize the value of training in both inpatient and outpatient settings, in both highly specialized and routine care, and in both urban and rural communities. Emphasis on any one element over or at the expense of another would be insufficient.

Further, given the preference of practicing physicians for urban and suburban settings, it would be reasonable to expect similar partiality among medical graduates; indeed, recruiting graduates to fill residency positions in rural areas traditionally has been difficult [#34]. Even graduates who complete training in those communities do not necessarily stay; Wyoming retained only 27.7 percent of physicians who completed GME in the state, Iowa retained 36.4 percent, and New Mexico retained 39.1 percent [#35]. Similarly, a recent evaluation of a rural-focused medical education program revealed that about half of participants—individuals who had voluntarily sought out a rural experience—ultimately returned to practice in a rural area [#36]. While opportunities to train in an area should be an important element of any state's workforce strategy, these retention numbers suggest that the availability of training positions alone cannot be expected to overcome the numerous other factors that influence a graduate's final practice location. The committee's proposal to redistribute funding away from existing training programs addresses none of these other obstacles affecting physician distribution. The committee overlooks existing educational strategies that could be amplified or augmented to better achieve the committee's goals.

For instance, the Medicare Rural Training Track (RTT) program provides an opportunity for urban hospitals, rural hospitals, and non-hospital clinical settings to form partnerships through

separately accredited RTT programs to train primary care residents to practice in rural areas [#37, #38]. The program offers mutually beneficial incentives to both urban and rural settings to pursue such partnerships. Urban hospitals participating in the program are allowed to receive additional GME funding above their cap for the time RTT residents train at their institutions—a rare exception to the 1997 law that set the cap. The rural hospitals also receive Medicare GME funding on the basis of the time RTT residents train at their institutions; additionally, the rural participants are able to share the accreditation and other costs/responsibilities with the urban facility. Recruiting residents to an urban-rural hybrid program also may prove easier than recruiting to a program that is exclusively rural, perhaps addressing the pipeline issue described above.

Residents in RTT programs must train at the rural site for more than half of their training—and, in practice, likely spend two-thirds of their time in rural communities. Studies of RTTs have demonstrated their success in recruiting and retaining physicians in rural communities, helping to alleviate some of the shortages that these areas face. For example, a comprehensive review of RTT outcomes in *The Journal of Rural Health* found that more than 70 percent of RTT graduates end up practicing in rural settings [#39].

Recognizing that the Medicare regulations governing establishment and operation of rural tracks are exceedingly complex, AAMC staff have produced resources to help guide institutions that may be interested in exploring a rural track. With such existing options available, the committee could have examined opportunities to build on proven successes, rather than call for a major legislative and/or regulatory overhaul. Exploring opportunities to enhance and improve established policies (such as the RTT, the ability of rural hospitals to expand their caps, and the ability of non-teaching hospitals to establish a new residency program) would have been more aligned with the committee's goal to "[e]nsure rational, efficient, and effective use of public funds for GME in order to maximize the value of this public investment" (pgs. 1-11 and 5-10).

Similarly, a more thorough analysis of the challenges preventing interested stakeholders from utilizing existing strategies could have offered productive recommendations to overcome those obstacles. For example, as described above, becoming a teaching hospital requires a sustainable administrative and financial commitment that the majority of hospitals are not willing or able to make. Further discussion is necessary to better understand if providing such institutions start-up assistance initially would make it more appealing for such facilities to administer training programs.

Training in Non-Hospital and Ambulatory Settings

There are a number of statements in the report that conflict with ACGME data. For example, the report states that "[n]early all GME training occurs in the hospital—even in primary care residencies" (pg. 2-11). The report cites one analysis finding "that only 53 percent of primary care residents train in hospitals that provide training opportunities in non-hospital settings" (pg. 2-12). Similar inaccuracies appear throughout the report (pgs. S-4, 3-13, and 5-7).

By contrast, the ACGME's Data Resource Book for the 2012–2013 academic year reports that 93 percent of GME programs in specialties leading to initial board certification—including both primary and non-primary care specialties—place residents in non-hospital and ambulatory

settings for portions of their training [#40]. These settings can include VA ambulatory services, community/federally qualified health centers, private physician offices, and other similar locations. Data collected from all ACGME-accredited programs through annual reporting requirements further verify these trends. All but a very small number of programs in the primary care specialties (from 99.3 percent to 100 percent) educate residents in ambulatory and/or non-hospital settings, with more than half of programs in family medicine (53.6 percent) and in pediatrics (56.3 percent) specifying community or federal public health centers.

As described in Section 6, where appropriate, medical educators continue to pursue opportunities to strengthen community-based collaborations at both the graduate and undergraduate medical education levels. Additionally, as a result of the changes enacted under ACA Section 5504 (described below), the community will be able to better track and study the extent to which training is occurring beyond the inpatient setting, with the goal of constantly improving that balance.

However, the obstacles to bolstering these relationships extend beyond questions of financing. For example, in its most recent report, the federal Council on Graduate Medical Education (COGME) describes, "Recruiting physician faculty for new programs in community and ambulatory settings is challenging" [#13]. In addition to concerns about the potential for reduced practice income and productivity, the COGME report explains that community physicians "are also concerned that they lack the expertise in teaching methodologies to assure quality educational outcomes and support for self and learner needs" [#13]. Opportunities may exist to develop and support programs to prepare community physicians to serve as educators, mentors, and training program administrators, another facet the IOM committee did not explore.

These sorts of partnerships with academic medical centers not only enhance trainees' education, but also offer vital benefits to the community-based facilities. A 2010 study described the barriers that FQHCs—which largely provide primary care services—face in securing specialty care for patients: 91 percent reported difficulties in finding off-site specialists for uninsured patients, 71 percent for Medicaid patients, and 49 percent for Medicare patients, though hospital affiliations eased the difficulty in some cases [#41].

These findings suggest a major obstacle in ensuring timely treatment, as a different study in *Health Affairs* reported that 25 percent of visits to FQHCs result in "medically necessary referrals for services not provided by the center" [#42]. The *Health Affairs* study reports that those centers affiliated with medical schools or hospitals report better access to specialty services, and notes, "If policymakers plan to extend access to primary care for the uninsured by increasing the number of CHCs [community health centers], they must also address the problem of access to secondary and tertiary levels of care." With major teaching hospitals treating a substantial and growing percentage of Medicaid and/or financially disadvantaged patients, the studies reinforce the importance of a comprehensive approach to resolving access issues, rather than growing the capabilities of one type of facility or specialty at the expense of others.

In a similar vein, the second round of Health Care Innovation Awards from the Center for Medicare and Medicaid Innovation (CMMI) shows that the nation's medical schools and teaching hospitals continue to lead community-based initiatives that improve outcomes, avoid

hospitalizations, and reduce costs among Medicare, Medicaid, and CHIP populations. These efforts focus on improved coordination with community-based providers and caregivers. They are conducted in partnership with community hospitals and doctors (both primary care and specialty physicians), a range of other health professionals (e.g., school nurses, care coaches, and social workers), and family members. Several are testing electronic and virtual technology [#43].

At many teaching hospitals, the majority of Medicare visits are provided in hospital-based clinics. In addition to serving as a safety net for vulnerable populations and offering primary care as well as comprehensive and coordinated care settings for patients with chronic or complex conditions, hospital outpatient departments (HOPDs) also are a venue for rich residency training experiences.

Legislative Remedies for Promoting Training in Community-based Settings

In addition to the policies described above, the report omits a number of other enacted or proposed legislative strategies that address the issues raised by the committee. For example, in its summary of legislative changes to GME (pg. 3-8, Box 3-1), the committee does not mention changes enacted under Section 5504 of the ACA. The provisions in Section 5504 were designed specifically to promote increased training in non-hospital settings by removing some of the barriers hospitals previously faced in counting the time residents spent training in those facilities. The section also requires CMS to track this training over time to measure the impact of the legislative change. The AAMC was among the supporters of the provision.

To further underscore the importance of enhancing trainees' exposure to and experience in such settings, the physician workforce legislation the AAMC has endorsed (S. 577, H.R. 1180, and H.R. 1201, described in Sections 4 and 5) prioritizes training in community-based and ambulatory facilities. Similarly, the "Medicare IME Performance Adjustment Program" established in H.R. 1201, also emphasizes training in a variety of settings and systems, among other "patient care priorities."

The AAMC also has been a strong advocate for workforce programs administered by the Health Resources and Services Administration (HRSA), such as the National Health Service Corps (NHSC) and the health professions programs authorized under Title VII of the Public Health Service Act. As discussed in Section 6 of these comments, these programs have demonstrated success in addressing many of the themes prioritized by the committee.

Ultimately, however, other factors such as clinical reimbursement and the practice environment are more powerful influences affecting physicians' career choices. Education and training cannot overcome the intense market incentives that motivate these decisions.

It also should be stated that the report's recurring theme that "medical education is not preparing physicians to practice in contemporary America" (pg. 1-9) simply does not reflect the current state of GME or the direction it is already moving. The committee appears to attribute such a conclusion to the inaccurate assumption that "[u]nder the status quo, nearly all GME training occurs in hospitals—including primary care residencies—even though non-hospital settings are where most physicians will spend their careers and where most people seek health care services" (pg. 5-7, with similar statements on pgs. 2-11 and 3-13). As described above, nearly all pipeline

programs require residents to spend some portion of their time in ambulatory or non-hospital settings, but this commitment to training outside the hospital should not in any way be interpreted to minimize the value of the residents' training within the hospital.

Balancing a resident's community-based experiences with training in the inpatient setting enables the physician to develop experience and expertise across the spectrum of illness from prevention to cures, training side-by-side in multidisciplinary, interprofessional teams. While most patients indeed will seek the bulk of their health care services in non-hospital settings, those same patients expect that their physician will have ample experience to recognize the need for hospital care and that the hospital will be staffed and equipped to provide such care. Shifting physician training primarily outside the hospital would deprive trainees of the depth of knowledge and skills that they acquire through their inpatient experiences. Mastery of these experiences equips physicians to apply this insight to all patients regardless of the future practice setting.

Reducing payments to hospitals in an effort to bolster support to non-hospital settings would be counterproductive. In effect, the report's recommendation to divert funding from hospital-based programs to ambulatory facilities would duplicate efforts already in progress, while seriously undermining what is working well within the training infrastructure.

4

ENHANCING TRANSPARENCY AND ACCOUNTABILITY

Summary of this Section:

- Like the committee, the AAMC recognizes the need for greater transparency of graduate medical education (GME) funds and accountability for training the workforce to meet future health care needs.
- Many of the report's recommendations for a "performance-based payment" system align directly with provisions in H.R. 1201, bipartisan legislation endorsed by the AAMC.
    - Like other federal pay-for-performance programs, H.R. 1201 would allow the Secretary of Health and Human Services (HHS) to reduce by up to 2 percent indirect medical education (IME) payments for hospitals that do not meet patient care performance standards in their residency training programs.
    - The AAMC believes this approach holds the most potential to meaningfully demonstrate the ongoing accountability of teaching hospitals for the public funds they receive without inadvertently undermining the nation's physician training enterprise.
- H.R. 1201 also includes provisions to enhance the transparency associated with Medicare GME, consistent with many of the transparency objectives the committee establishes.
    - Some of the committee's questions regarding transparency already can be answered under the current system, while others are administratively infeasible to answer, both under the current system and under the committee's proposal.
    - Gauging the "success" of a medical education program on the basis of outcomes that are largely the result of graduates' personal choices is likely to be ineffective.
- The report understates the role that efforts by the Accreditation Council for Graduate Medical Education (ACGME) will play toward many of the committee's objectives.

The AAMC and its members are working to achieve the goals of better coordinated, team-based, and system-focused care prioritized by the committee. In Section 6 of these comments, we describe in greater detail a number of the initiatives already underway across academic medicine. These efforts are transforming the continuum of medical education and preparing physicians to practice in the changing health care system. Additionally, as part of a comprehensive strategy to increase the number of Medicare-funded residency slots, the AAMC has endorsed bipartisan legislation—H.R. 1201, the *Training Tomorrow's Doctors Today Act*—to establish an IME performance adjustment program to better demonstrate teaching hospitals' ongoing commitment to accountability. Many of the bill's provisions align directly with the Medicare Payment Advisory Commission (MedPAC) recommendations that the committee cites (pg. 4-13), as well as with the "performance-based payment" system that the committee's report outlines (pg. 5-26).

However, as described previously in these comments, the committee's proposal to eliminate the IME payment would have the unintended consequences of reducing patient care services and potentially reducing the number of residency positions, jeopardizing the ability of Medicare to ensure access to care for the elderly. Further, the committee's recommendation to deliberately transfer limited Medicare resources to settings that do not serve Medicare beneficiaries fails the most basic qualification of accountability for public funds.

Though the committee defers most details of the new performance-based payment proposal to its proposed Policy Council, the AAMC offers the following observations with respect to GME accountability.

Transparency and Accountability Measures in H.R. 1201

The committee lists a number of stakeholders that have "called on CMS to introduce GME performance metrics and outcomes-based GME payment in the Medicare program" (pg. 4-13). In 2012, the AAMC endorsed legislation (in conjunction with GME expansion legislation) introduced by Sens. Jack Reed (D-R.I.) and Jon Kyl (R-Ariz.) to establish such measures in accord with the recommendations issued by MedPAC. Reps. Aaron Schock (R-Ill.) and Allyson Schwartz (D-Pa.) introduced the *Training Tomorrow's Doctors Today Act* (H.R. 1201) in the 113th Congress. Nearly two dozen physician and other organizations endorsed the bill, including groups representing primary care physicians and groups representing specialists. The provisions included in this legislation align with the committee's expectation that "Medicare GME funding should be explicitly purposed to encourage production of a physician workforce better prepared to work in, to help lead, and to continually improve an evolving health care delivery system that can provide better individual care, better population health, and lower cost" (pg. 4-4).

Specifically, H.R. 1201 directs the HHS Secretary to implement IME payment adjustments based on whether a teaching hospital trains residents in clinical care environments that model:

- A variety of clinical settings and systems;
- Multispecialty and interprofessional teams;
- The relevant cost and value of diagnostic and treatment options;
- The delivery of evaluation and management (versus procedural) services;
- Methods for identifying system-based errors and implementing system-based solutions; and
- Other "patient care priorities."

The bill calls for a process to identify and establish performance measures that are consensus-based, incorporate qualified stakeholders, and are consistent with the efforts of the GME accrediting bodies. The AAMC strongly believes that to be maximally effective, any accountability reporting and measures should be consistent with data already being collected for federal quality metrics, by ACGME for accreditation purposes, and other initiatives.

To incentivize adoption of these patient care priorities without destabilizing institutions' ability to serve their communities, the IME performance adjustment program in H.R. 1201 would allow the Secretary to reduce by up to 2 percent IME payments for hospitals that do not meet performance standards. The AAMC believes this approach holds the most potential to meaningfully demonstrate the ongoing accountability of teaching hospitals for the public funds they receive without inadvertently undermining the nation's physician training enterprise. The 2 percent figure also would make the IME performance adjustment program consistent with the percentage of funding at risk under other federal pay-for-performance programs such as Medicare's Value-Based Purchasing Program (2 percent) and Physician Quality Reporting Program (2 percent).

Placing substantially more than 2 percent of an institution's GME payments at risk from year to year likely would yield unintended consequences. Prudent fiscal planning would force even the

best-performing institutions to budget for the maximum cut to ensure their ability to sustain their programs and services in the event of a substantial loss. Payments under such a system likely would take on the characteristics the committee associates with discretionary appropriations, introducing "significant risk and considerable uncertainty for training programs" (pg. 5-4), rather than the continuity and stability of funding that the committee prioritizes. The risk would be compounded by cuts already being imposed on teaching hospitals as a result of sequestration and dwindling clinical revenues. Accordingly, institutions may reassess the viability of continuing their costliest efforts under extreme financial pressures, as some reports already have begun to indicate [#26].

Moreover, the primary objective of any performance-based system should be to improve performance, not to undermine the ability of the entity to achieve those measures and not to generate savings. Instituting a system that imposes an unreasonable percentage of cuts on institutions would deprive patients of lifesaving services unavailable elsewhere in the community; destabilize the infrastructure for education, research, and patient care; and penalize trainees. Particularly given the report's repeated comment that comprehensive, reliable data on GME are scarce (pgs. S-5, S-7, 3-1, 3-23, and 4-1), it would be unwise to promote major reductions to the program without the necessary information to ascertain the institutional, community, and societal impact of such reductions.

H.R. 1201 also incorporates legislative changes to enhance the transparency associated with Medicare's support for GME. Here, too, the legislation would achieve many of the transparency objectives the committee establishes (pg. 4-7). Under H.R. 1201, the HHS Secretary would be required to issue an annual report on Medicare GME payments, including data on:

- DGME and IME payments made to each hospital;
- DGME costs of each hospital, as reported on the annual Medicare cost reports;
- Number of full-time equivalent residents (FTEs) at each hospital that are counted for DGME and IME purposes;
- Number of FTEs at each hospital that are not counted for DGME and IME purposes; and
- Factors contributing to the higher patient care costs at each hospital, including:
    - Costs of trauma, burn, and other stand-by services;
    - Provision of translation services for disabled or non-English speaking patients;
    - Costs of uncompensated care;
    - Financial losses with respect to Medicaid patients; and
    - Uncompensated costs associated with clinical research.

Some of the questions the committee poses regarding transparency already can be answered under the current system. For example, information on "How much does each teaching institution receive in Medicare GME funding each year?" (pg. 4-7) can be derived via cost reports posted on CMS's public website. And the HHS tracking requirements under Sec. 5504 of the Affordable Care Act (ACA) (discussed in Section 3) will help answer the committee's question regarding the proportion of trainees' time in community-based settings.

At the same time, some of the questions in this section of the report cannot be answered – and would not be able to be answered, even if the committee's proposed new system were to be

enacted. The committee assumes that it is possible to identify which individual trainees are "funded" by public dollars and which are supported by other funding sources. This assumption oversimplifies the nature of Medicare payments. Federally funded cap positions are not specialty-specific; therefore, it is effectively impossible to separate out which positions fall "under the cap" and which are "over." As a result, it is not administratively feasible to report federal funding by type of residency or per residency slot. The committee's proposal to simply shift these funded positions to the program sponsor does not resolve the infeasibility, making it administratively impractical to track and study the specialty and demographic characteristics of "funded" trainees (pgs. 4-7, 5-8, and 5-17).

The Next Accreditation System

As stated above, the AAMC has endorsed and continues to advocate for H.R. 1201, legislation that will help demonstrate the ongoing accountability of GME-funded institutions. Our support for meaningful accountability measures notwithstanding, we also must note that the report understates the role that ACGME efforts will play toward most of the committee's objectives.

The AAMC supports ACGME's transition to outcomes- and competency-based accreditation, described in the committee's report (pg. 4-11). The report also highlights the aims of the ACGME's Next Accreditation System (NAS) to "prepare physicians for 21st century practice" and to "accelerate the system's transition from a focus on process to a system based on educational outcomes" (pg. 4-11). As the committee states, "Every ACGME-accredited residency program will be required to demonstrate that its trainees achieve competencies in the six domains," which include patient care, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, and systems-based practice (pg. 4-11). Additionally, the ACGME's Clinical Learning Environment Review (CLER) visits are intended to "increase the educational emphasis on patient safety," as well as "provide opportunity for sponsoring institutions to demonstrate leadership in patient safety, quality improvement, and reduction in health disparities" [#44].

These objectives directly align with the committee's interest in "producing an appropriately balanced physician workforce ready to provide high-quality, patient-centered, and affordable health care" (pgs. S-2 and 2-1). The report acknowledges that "accreditation and board certification are essential to ensuring that GME programs meet professional standards and produce physicians who are ready to enter practice with required knowledge, experience, and skills," but also dismisses the effectiveness of such requirements in achieving the committee's goals (pg. 4-5).

For example, the report criticizes the accountability of the current system by indicating that funding is "essentially guaranteed except for the requirement that residencies be accredited to receive federal support" (pgs. 4-1 and 4-5). Achieving and maintaining accreditation is no small feat. Programs that do not meet these rigorous standards risk their eligibility for federal funding. Many of the reported educational gaps that the committee expresses concern over in shaping the physician workforce for future practice (pgs. S-4, 1-9, 1-10, 2-11, 2-15, 4-4, and 5-6) would be—and likely already are being—better addressed through efforts of the accreditors, rather than through a wholesale dismantling of the GME financing system.

Developing Reasonable Accountability Measures

The committee's underlying assumption throughout the report appears to be that the specialty and geographic practice choices of graduates can be manipulated through GME payments to training institutions. This philosophy is reflected, for example, in the questions the committee poses regarding the ultimate specialty and geographic practice choices of federally funded trainees (pg. 4-7), in the public measures the committee suggests (pg. 4-14), and in the type of information the committee directs its proposed Policy Council to evaluate (pg. 5-17). In explaining why the committee views accreditation to be an insufficient mechanism for accountability, the committee affirms this perspective, stating that accreditation "cannot address broader national objectives regarding the make-up of the physician workforce, the geographic distribution of GME resources, or other priority concerns" (pg. 4-5).

Yet, past attempts to leverage GME payments to affect these national objectives have proven unsuccessful. As described in Section 5, since the mid-1990s, hospitals have received twice the DGME payment for primary care and geriatrics residents as subspecialty fellowships, yet shortages persist. In recognition that GME payments are unlikely to be a reliable lever in addressing workforce outcomes, MedPAC has pointed instead to factors outside the Medicare program [#45].

Aside from the report's unsupported premise regarding the influence of GME payments in shaping the workforce, the logistical complexities associated with the committee's suggested approach to accountability may render it impractical. In its recent report, COGME also prioritizes the need for enhanced transparency in GME funds, stating, "Transparency around the allocation of federal support, how programs use such funds, and the outcomes they achieve, could inform policy and drive program performance" [#13]. At the same time, the council acknowledges that, in practice, it can be unrealistic to expect to draw reliable conclusions from investments and program "outcomes." The report continues that "linking program cost information with outcomes metrics requires a level of financial disclosure that even the most forthcoming training programs may find difficult, if not impossible, to provide" [#13].

The IOM committee's interest in studying the workforce landscape is understandable, and the AAMC has long supported a robust workforce research agenda. To that end, the AAMC launched its Center for Workforce Studies in 2004, advocated for the establishment of and funding for the Health Resources and Services Administration (HRSA)'s National Center for Workforce Analysis, and continues to support funding for the National Health Care Workforce Commission. Imposing administratively unfeasible requirements on medical education programs, however, would not advance workforce planning goals in a meaningful way.

For instance, the data points prioritized by the committee do not account for the fact that health needs and demands vary at the local level and also over time, or that personal decisions (e.g., family demands, the careers of spouses, personal lifestyle choices) are major factors in determining the specialty and geographic location in which a physician will practice, a point the committee itself makes on page 2-8. These complex personal factors are largely outside the scope of an institution's influence, yet institutions would be responsible for tracking the outcomes of such decisions over long periods of time and would be held accountable for factors over which they have limited control.

Gauging the "success" of a medical education program on the basis of outcomes that are largely the result of personal choices is likely to be ineffective. Holding institutions accountable for choices their graduates make would be akin to holding physicians accountable for the choices their patients make. Should primary care physicians be penalized if their patients exceed weight guidelines or if patients continue smoking despite being advised by their physician to quit? The physician community has not endorsed such an approach to date, and for good reason. For example, the guidelines one physician organization uses to assess pay-for-performance (PFP) programs stipulate, "There should be no reduction in existing fees for service paid to physicians as a result of implementing a PFP program," and "Patient cases should be removed from the performance measure(s) being assessed ... when a physician can demonstrate that attempts have been made to provide patients support to follow recommended care and they have subsequently not followed such recommendations..." among other principles [#46].

Additionally, imposing one-size-fits-all "accountability" measures that do not reflect local and/or specialized needs could inadvertently penalize facilities that are actively addressing the population's health care needs. It is important to keep in mind that some training programs are nationally recognized for focusing on a relatively narrow range of specialties and for training residents in a metropolitan region (e.g., cancer hospitals, pediatric cancer/research institutes, rehabilitation hospitals).

Likewise, the pipeline of physician scientists overwhelmingly is filled by trainees pursuing specialty disciplines. For example, family medicine accounted for 1.03 percent of M.D.-Ph.D. active residents in 2013, disproportionately less than its representation among all active residents graduating from U.S. M.D.-granting schools [#47]. An advisory group to the National Institutes of Health (NIH) recently concluded that the nation will not be able to sustain the physician scientist workforce as current physician scientists retire and clinical demands increase [#48]. These trends reinforce the need to ensure that any GME accountability measures facilitate a workforce that supports and advances medical and scientific discovery. Establishing accountability metrics that aim to prioritize one discipline or one training setting over others could hamper such efforts.

Rather than imposing unreasonable measures on institutions, the AAMC advocates performance measures toward the committee's goals that institutions can reasonably address, such as the accountability metrics included in H.R. 1201.

5

EVALUATING PHYSICIAN SHORTAGES AND SPECIALTY COMPOSITION

Summary of this Section:

- A number of factors indicate that the nation faces a significant physician shortage by 2025, and beyond. These projections are best used as a directional guide to future challenges rather than a precise predictor.
    - Current projections indicate the shortfall of physicians spans evenly across both primary and specialty care.
    - Shortages will affect all Americans, and the most vulnerable populations in underserved areas will be the first to feel the impact of physician deficits (e.g., the VA).
- It is surprising that the committee rejects existing evidence of existing and looming physician shortages on the basis that studies' methodologies do not reflect the future health care system. Rather than discount the validity of workforce projections, the AAMC strongly believes it is imperative to devote more energy to empirical analyses.
    - Evidence is scarce demonstrating decreased utilization resulting from delivery system changes.
    - Changing practice patterns and other efficiencies may mitigate some factors causing shortages over the long term, but data to support these assumptions are not definitive, and transformation will take time. Meanwhile, the population's demographics will strain the existing health care system.
    - Transformations in health care delivery will not obviate the need to train more physicians. No single approach is sufficient.
    - The AAMC has endorsed graduate medical education (GME) expansion bills (S. 577, H.R. 1180, and H.R. 1201) that, even when enacted, would address only a small fraction of the looming shortages.
- The committee's assumptions regarding growth in residency positions do not consider a number of important factors, such as the ability for some programs to grow with Medicare support or the effect of emerging financial pressures on teaching hospitals.
- The AAMC agrees with the committee's statement that international medical graduates (IMGs) are an important part of GME and the physician workforce.
    - Losing this cohort of physicians would have significant implications for rural and underserved communities that rely on IMGs, who often practice in such areas as a condition of remaining in the United States.
    - IMGs not only help address primary care needs, but fill deficits in specialty care as well.
- The aging population will need reliable access to both primary care and specialty care physicians.
    - A lifetime of reliable access to primary care will help prevent and/or manage a number of chronic conditions that the population will face. At the same time, aging baby boomers will require long-term specialty care for age-related illnesses and disabilities.
    - As we continue to make progress in treating acute conditions, survivors are likely to encounter a number of complex health issues throughout their lives. For example, survivors of childhood cancers encounter a number of subsequent health conditions that will require ongoing medical care into adulthood and as they become seniors.
- The AAMC agrees with the committee's observation that clinical reimbursement and the practice environment are "far more important than GME" in determining the specialty mix of physicians. Federal programs such as Nation Health Service Corps (NHSC), Title VII, and others also have shown success.

The AAMC recognizes the committee's desire to shape the health care system of the future through the health care workforce (pgs. S-13 and 5-28). As evident in examples detailed in Section 6 of these comments, medical schools and teaching hospitals across the country share this commitment and are actively advancing the principles and practices that will best prepare the next generation of health professionals to provide the highest quality care to tomorrow's patients. In carrying out this vital responsibility, however, these institutions also have an obligation not to neglect the health care needs of today's patients, who are seeking care in today's health care system [#49].

While the promise of "high-value, high-performance," and more prevention-centric care referenced by the committee (pgs. 2-9 and 5-3) is worth striving toward, in practice, physicians will be treating patients who have lived a lifetime under the current health care system and for whom prevention may not have yielded the promised benefits [#50].

As the committee concedes, a number of factors beyond GME alone will determine the course of the health care system (pgs. S-13 and 5-28), and transformation will take time. It is surprising, therefore, that the committee opts to reject the overwhelming evidence of existing and looming physician shortages because they believe that the studies' methodologies "do not adequately relate the demand for physicians to the features of a high-performing system of care," and that the studies "also ignore the regional variations in workforce supply" (pg. 2-15). The report also posits, "In contrast, too little focus has been given to how best to organize and deploy physicians through innovative approaches to care delivery," and that "[m]uch remains to be learned" (pg. 2-15). At the same time, however, the committee concludes, "Significant reforms are needed to ensure that the public's sizeable investment in GME is aligned with the health needs of the nation" (pg. S-8). This contradiction—implying that the current investment is not meeting the nation's health needs after concluding that the evidence base is insufficient—suggests an insufficient analysis. The approach is particularly vexing in that the committee appears to be assuming answers to issues that are yet unknown, such as the structure of the future health care system.

Physician Shortages

A number of factors indicate that the nation faces a significant physician shortage by 2025 and beyond, spanning evenly across both primary and specialty care [#51]. These shortages are largely a result of our aging patient population battling multiple chronic conditions, an influx of up to 32 million newly insured individuals entering the health care system with previously untreated conditions, and the looming retirement of current practitioners [#51]. Changing practice patterns and employing other efficiencies in care delivery may mitigate some of these factors over the long term [#50]. However, the data to support these assumptions are not definitive enough to wholly dismiss existing workforce projections, which are best used as a directional guide to future challenges rather than as a precise predictor [#50].

Evidence is scarce that delivery system changes to date have decreased utilization [#49, #52]. In the meantime, the population's demographics will strain the existing health care system. Despite successful efforts of existing and new medical schools to increase enrollment, residency training positions at teaching hospitals have not grown at the same pace, limited by the cap on Medicare

support imposed by the Balanced Budget Act of 1997. Hence, while demand for health care services will grow, there will not be commensurate growth in supply, leading to shortages.

Recent headlines illustrate the tragic consequences of these trends. The Department of Veterans Affairs (VA) physician shortages are evidence of nationwide physician shortages. VA Secretary Robert McDonald has testified regarding the VA's efforts to hire more than 28,000 physicians and other clinicians [#53], and AAMC analysis of physician vacancies posted on the VA website as of July indicates that more than two-thirds of postings were for specialists [#54]. Through existing and new affiliations, AAMC members have been expanding the clinical health care services they already provide to veterans. In 2012, more than 1.2 million VA patients were served by a non-VA provider, many through sole-source contracts for specialty services between local VA medical centers and AAMC-member institutions. Agreements like these are critical to expanding care for veterans at non-VA facilities.

Nonetheless, improving veterans' access to care will require efforts to bolster the physician workforce. AAMC-member institutions are an integral partner in VA residency training. As the committee discusses, nearly all (99 percent) VA residency programs are sponsored by an affiliate medical school or teaching hospital (pg. 3-22). While there is considerable variability among VA medical centers, programs, and specialties, on average "VA residents" spend approximately three months of a year at the VA (i.e., one-quarter of their training). The other nine months are spent in training at the academic affiliate. Partnerships with teaching hospitals provide specialized clinical experiences required for residency training—Level 1 trauma units and burn centers, for example—that are not always readily available within the VA. Thus, medical schools and teaching hospitals absorb the additional time and indirect costs of training.

In response to the reported shortages, Congress recognized the VA needs additional GME positions to supply an adequate physician workforce. The Veterans Access, Choice, and Accountability Act of 2014 provides $5 billion to hire, recruit, and train health professionals, including 1,500 residency slots over five years at VA facilities. However, to successfully expand VA GME, medical schools and teaching hospitals likely would have to add additional non-VA positions to meet all program requirements. Therefore, recommendations to limit Medicare GME support likely would further impede this necessary and supported expansion.

Though shortfalls will affect all Americans, the most vulnerable populations in underserved areas will be the first to feel the impact of the deficit of physicians (e.g., the VA, Medicare and Medicaid patients, rural and urban community health centers, and Indian Health Service). Besides the AAMC, other advisory bodies have indicated concerns that the future workforce supply will not be sufficient to meet ballooning demand. For example, the Council on Graduate Medical Education (COGME) indicates in its recent report that the council "does not share the IOM Committee's conviction that current funding levels and residency positions are adequate to meet future health needs" given expected shortages and that "COGME disagrees with the IOM Committee's recommendation that funding should be limited to current levels" [#13].

As described in the association's *2012 Physician Workforce Policy Recommendations*, the AAMC believes that the ideal team-based health care delivery and utilization model should efficiently use human resources to improve patient access to appropriate services [#55]. For

example, some patients managed by specialists can be directed back to primary care providers with management plans for chronic conditions. Other providers in a variety of settings could care for lower-acuity patients now treated by physicians. Optimizing utilization will help relieve both the burden on patients seeking to access appropriate health care services and overwhelmed providers but will not obviate the need to train more doctors.

Physician shortages will persist even if the Medicare funding caps are lifted today, given the severity of the problem and a likely modest rate of change in the delivery and payment systems. As health care is better integrated—team care expands and unnecessary variations are reduced—newly insured patients will present in the offices of primary care providers. For many of those patients, primary care providers will need to coordinate the care of subspecialists for complex illnesses. These needs will outstrip the supply of many subspecialists at current levels, even if utilization rates are significantly reduced. Further, the "high-performance" health care system that the committee envisions likely will need to address the current *underutilization* of care in some areas [#49]. An adequate supply of physicians must be achieved both through more efficient health care delivery models and by increasing physician training positions. No single approach is sufficient.

Accordingly, the AAMC's physician workforce policy recommendations (described further in Section 8) recommend that Congress increase the number of Medicare-supported GME training positions by at least 4,000 new positions each year. This increase will enable the nation's teaching hospitals to train more physicians, but no more than one-third of the additional physicians required to meet the needs of a growing, aging population [#51]. This growth also likely would be required to accommodate the additional graduates from accredited medical schools [#56, #57]. In other words, the success of this recommendation is based on the expectation that the other two-thirds of the shortage can be resolved through changes to the delivery system, technology improvements, and other enhancements to care.

Consistent with these policy recommendations, the AAMC has endorsed GME expansion bills that would direct new GME funding to shortage specialty residency programs and prioritize communities that have invested in new medical schools. These bills include the *Resident Physician Shortage Reduction Act* (S. 577 and H.R. 1180) and the *Training Tomorrow's Doctors Today Act* (H.R. 1201).

Implications of Existing Caps on Medicare GME Support

In 2013, the number of students enrolled in their first year of medical school exceeded 20,000 for the first time, reaching 20,055 [#58]. The AAMC expects that in the 2018–2019 academic year, enrollment in medical schools will have increased by 30 percent over their 2002–2003 levels, in response to physician shortage projections [#57]. Enrollment at osteopathic medical schools has grown even more rapidly, with classes increasing 11.1 percent in 2013 over the prior year [#56]; the number of osteopathic medical schools has doubled from 20 in 2003 to 40 in 2014 [#59].

As the report notes, the AAMC has concerns that the number of U.S. medical graduates may soon exceed the number of first-year residency positions. After the 2014 Main Residency Match and Supplementary Offer and Acceptance Program, 412 U.S. seniors remained unmatched to a residency program [#60]. The report counters that "[r]ecent evidence does not support this

concern," because in 2014, there were more first-year residency slots than U.S. graduates (pg. 2-3). Table 1-1 of the report similarly compares the number of U.S. graduates in 2013 to the total number of ACGME residency positions (pg. 1-5). Both of these comparisons, however, fail to account for the growth in enrollment described above. The number of 2013 U.S. M.D. (20,055) and D.O. (6,449) enrollees totals 26,504—perilously close to the 26,678 PGY-1 ACGME residency positions offered through the Match in 2014 [#61].

The committee also contends that the number of residency positions has grown over the years, seemingly expecting continued growth by the time the 2013 cohort participates in the 2017 Match (pgs. S-4 and 2-6). Consequently, the committee concludes that the caps on Medicare support have not inhibited growth in training programs and that "increasing the production of physicians is not dependent on additional federal funding" (pgs. S-4 and 2-3).

The committee's assumptions in this regard do not consider a number of important factors. For example, the committee's conclusion implies that the cited growth in residency positions occurred above the caps (and therefore without federal support), a point that is not specified. Some or all of the growth described may represent rural training programs growing to capacity and/or new programs being established at new teaching hospitals; training programs in both scenarios would be eligible for and may have received Medicare funding, thereby negating the committee's conclusion regarding the necessity of federal support. Likewise, other federal programs outside Medicare, such as the Primary Care Residency Expansion and the Teaching Health Center programs have contributed to some of the growth in positions, while the Medicare Modernization Act, the Affordable Care Act (ACA), the National Residency Matching Program's "all in" policy, and other policies also have affected the number of training positions. While teaching hospitals have supported some positions over the caps, emerging financial pressures of significant clinical payment reforms under the ACA threaten their ability to continue this level of support. Data from the ACGME survey cited previously confirm that the prospect of reduced federal support for GME could result in program closures or reductions [#26].

The report also is inconsistent in the conclusions it draws about the role that federal funding plays in growing training programs. For instance, describing the expiration of federal appropriations for the teaching health center program, the committee indicates "existing or prospective THCs may find it difficult to recruit future trainees without some assurance of future funding" (pg. 3-20).

International Medical Graduates

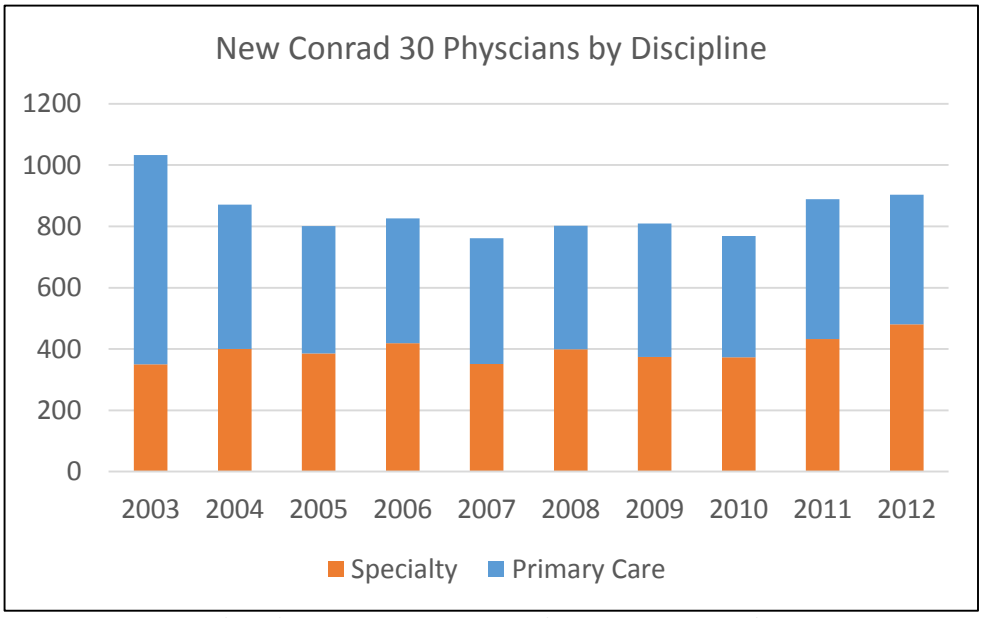
The AAMC agrees with the committee's statement that graduates of international medical schools or international medical graduates (IMGs) are an important part of GME, totaling approximately one-quarter of physicians entering the U.S. workforce (pg. 2-6). Roughly 6,400 positions in the 2014 Match were filled by graduates of international medical schools, over 40 percent of whom are U.S. citizens [#61].

As the intersection between qualified medical graduates and available training opportunities approaches, some observers have suggested that training programs could accommodate the increasing number of U.S. medical school graduates by preferentially or exclusively accepting M.D. and D.O. graduates of U.S. medical schools. Though the committee does not state such a

recommendation in its report, it is important to note that this type of proposal would have no effect on the physician shortage. Under such a plan, the total output of physicians would remain the same. Preventing IMGs from completing residency training simply would ensure that only U.S.-educated medical graduates are able to practice in the United States, even as the nation faces significant physician shortages in the next decade.

Losing this cohort of physicians also would have significant implications for a number of rural and underserved communities that currently rely on IMGs, who often practice in such areas as a condition of remaining in the United States. The J-1 "exchange visitor" visa allows medical students from other countries to attend residency training in the United States, requiring physicians to practice for at least two years in their home country after completing their U.S. residency. The Conrad State 30 J-1 visa waiver program ("Conrad 30") enables state agencies to recruit these physicians to underserved areas for three years in exchange for waiving the home country practice requirement. State agencies have some discretion in shaping their Conrad 30 programs to address states' priorities and some latitude in determining what specialties are needed, provided that they demonstrate, according to their own criteria, shortages in the specialties they recruit. Currently, as depicted in Figure 7, non-primary care specialties constitute approximately half of Conrad 30 waivers requested by state agencies [#62]. These patterns suggest that IMGs not only help address primary care needs, as cited by the committee (pg. 2-6), but fill deficits in specialty care as well.

Figure 7: States Use Conrad 30 Waivers to Fill Shortages in Specialty and Primary Care



Source: AAMC analysis of data from Texas State Department of Health annual survey of state Conrad 30 programs

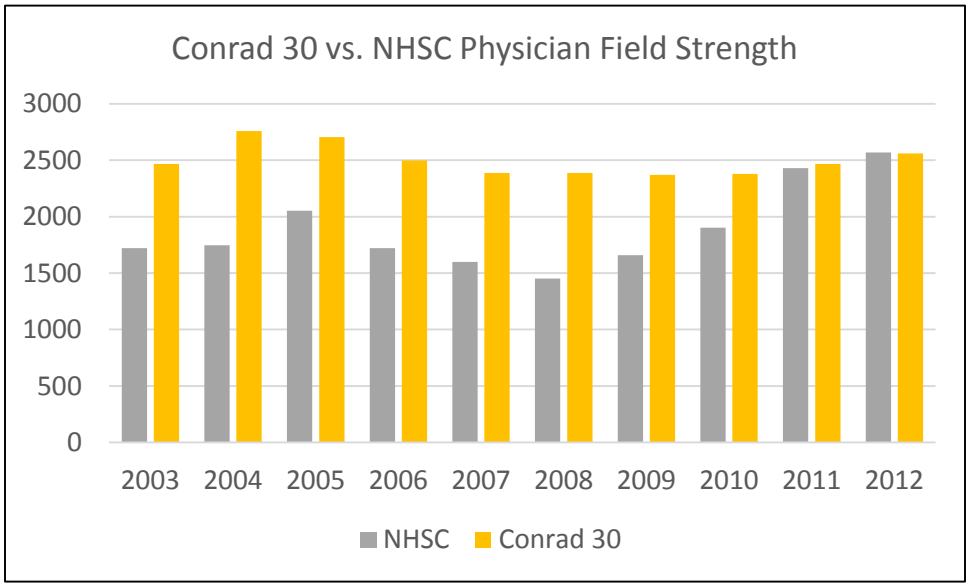
In 2012, a total of 2,561 physicians served in underserved communities in nearly every state under the Conrad 30 program [#62]. To put this into context, nationwide, Conrad 30 programs recruit physicians to underserved areas at levels comparable to the NHSC—which, like the Conrad 30 program, provides incentives to practice in underserved communities. In fact, Conrad 30

programs historically have out-performed the NHSC, which is limited by its annual appropriation (see Figure 8).

Because the NHSC recruits practitioners through scholarships and loan repayment, the Conrad 30 program accomplishes a similar goal at a lesser cost to the government. Reducing the proportion of IMGs in the U.S. workforce thus would create a recruitment deficit resulting from a decrease of Conrad 30 physicians. Moreover, because the NHSC is limited solely to primary care, the program would not be able to fully compensate for the loss of Conrad 30 physicians, nearly half of whom practice non-primary care specialties, a challenge for many underserved communities.

Recognizing that the nation can do a better job at recruiting U.S. physicians to underserved areas, the AAMC workforce recommendations assume sustaining an appropriate level of physician immigration. The AAMC supports a balanced physician immigration policy that prevents international "brain drain," and endorses the J-1 exchange visitor visa as the most appropriate pathway for residency training. These recommendations also enable the country to fulfill its responsibility to share world-class U.S. medical knowledge more globally by preserving opportunities for some number of U.S.-educated IMGs to return to their home countries.

Figure 8: Conrad 30 & NHSC Recruit Physicians to Underserved Areas



Source: AAMC analysis of data from HRSA and Texas State Department of Health annual survey of state Conrad 30 programs

Regarding the "brain drain" concern cited in the report (pg. 2-6), the AAMC concurs that such policies should be considered with sensitivity to health care needs beyond those of the U.S. population and extending to the home countries of IMG physicians. It should be noted, however, that the ethical challenges associated with such policies are multifaceted. For example, such concerns often assume that IMGs would not immigrate to the United States under other circumstances. Indeed, while employing health professionals from other countries presents a complicated set of concerns, it similarly is not straightforward to consider the dilemma that results from forcing qualified medical graduates to pursue other careers in the United States while American communities struggle to recruit practitioners with the graduates' expertise.

An Aging Population Requires Both Primary and Specialty Care

Though the committee dismisses the reliability of workforce projections, it also raises concerns over low interest in or emphasis on primary care (e.g., pgs. S-4, 2-3, 2-7, 2-9, 2-14, 3-33, and 3-34). For example, the report expresses concern that the nation "is not producing an increasing proportion of physicians who choose to practice primary care," (pg. 2-3) and states, "A high-value health care system ... emphasizes primary rather than specialty care" (pgs. 5-3 and 5-4). However, the committee does not provide an in-depth analysis of the workforce necessary to achieve the goals it identifies.

A thorough assessment of the nation's health needs reveals that the population will need reliable access to both primary care and specialty care physicians. The expected shortfall in the number of primary care physicians will impede access to preventive care for millions, resulting in missed opportunities in some cases to prevent the progression of various health conditions or to manage chronic conditions.

At the same time, the growing shortage of specialists increasingly will limit health care access for patients with cancer, Alzheimer's disease and dementia, hip fractures, and other ailments. These trends are of particular concern as more and more baby boomers require long-term specialty care for age-related illnesses and disabilities.

Consider, for example, the leading causes of death for seniors. According to the CDC's most recent National Vital Statistics Reports, in 2010, heart disease alone accounted for 26.5 percent of deaths among seniors, and nearly one-third (30.8 percent) of deaths over the age of 85 [#63]. Cancer caused 22.1 percent of deaths for individuals over 65. While a lifetime of reliable access to primary care may help catch or manage a fraction of these diagnoses in their early stages, for adults whose conditions continue to progress over time—and for those whose conditions have been treated or who face a high risk of recurrence—access to cardiologists, cardiothoracic surgeons, oncologists, and other specialists also will be essential.

For example, nearly 70,000 individuals between 15 and 39 years of age are diagnosed with cancer each year, and it outranks all other disease-related causes of death in adolescents and young adults (AYA). As identified in the IOM's 2013 workshop, "Identifying and Addressing the Needs of Adolescents and Young Adults with Cancer," survivors of childhood cancers encounter a number of subsequent health conditions that will require ongoing medical care throughout the course of their lives [#64].

The workshop summary notes that the prevalence of cardiovascular disease and disability is twice as high in young adults and adolescents who survive cancer compared to people who have never had cancer [#64]. Studies indicate cancer survivors are also at increased risk for diabetes, asthma, hypertension, obesity, metabolic disturbances, infertility, and secondary malignancies, as well as psychiatric conditions such as anxiety, depression, substance abuse, and suicide [#64]. In fact, research suggests that nearly half of childhood cancer survivors experience a serious or life-threatening condition or death between 5 and 30 years after diagnosis [#65], with another study finding that 81 percent experienced a severe or life-threatening condition by age 45 [#66]. While we continue to make progress in mitigating the effects of numerous conditions—in large part because of medical research conducted at medical schools and teaching hospitals—in the

interim, survivors are likely to encounter a number of complex health issues into adulthood and as they become seniors (and, as the future health care system manifests).

Given these increased risks, the 2013 workshop summary highlights the importance of long-term access to adequate survivorship care into adulthood, while also noting that many survivors are not receiving the appropriate follow-up care, with only 14 percent receiving general survivorship assessments and only 18 percent undergoing recommended risk-based assessments [#67]. Another study found that "although most respondents had had a general exam within the previous two years, less than half had had a cancer-related visit" [#68]. Acknowledging barriers across the spectrum of care providers and settings, the workshop summary states, "Among primary care providers ... studies find a lack of relevant knowledge and experience or comfort level with the AYA cancer patient population and sometimes even an unwillingness to take care of these individuals. 'There is some reluctance on the part of these primary care providers in particular to take on the care of these medically complicated patients who they do not know and in the context of a very busy primary care practice that may have difficulty accommodating them'" [#64].

These types of analyses present opportunities for all caregivers to assume a more active role in connecting patients to the appropriate care, but also underscore the importance of equipping the patient with the most comprehensive team of health professionals necessary, including both primary and specialty care. Relying on new delivery models to alleviate physician shortages assumes that all patients currently are receiving the optimal (or an excessive) level of care—a premise that is not supported.

Similarly, there are myriad health care services that cannot be fully avoided even when patients receive the best, most comprehensive primary care services. For example, the CDC reports that unintentional falls afflict more than 2.4 million seniors over age 65 each year, accounting for 62.2 percent of all non-fatal injuries for seniors and a staggering 80.2 percent of injuries among adults over age 85 [#69]. According to the American College of Surgeons National Trauma Data Bank 2013 Annual Report, falls accounted for more than 40 percent of trauma cases, and a substantial number of these patients are over age 65 [#70]. Accordingly, patients of all ages will be best served with reliable access to sufficient numbers of *both* primary and specialty care physicians. As 10,000 Americans celebrate their 65th birthday each day for the next two decades [#71], and as more seniors live longer lives, these health care needs only will continue to grow.

Micromanaging Specialty Composition

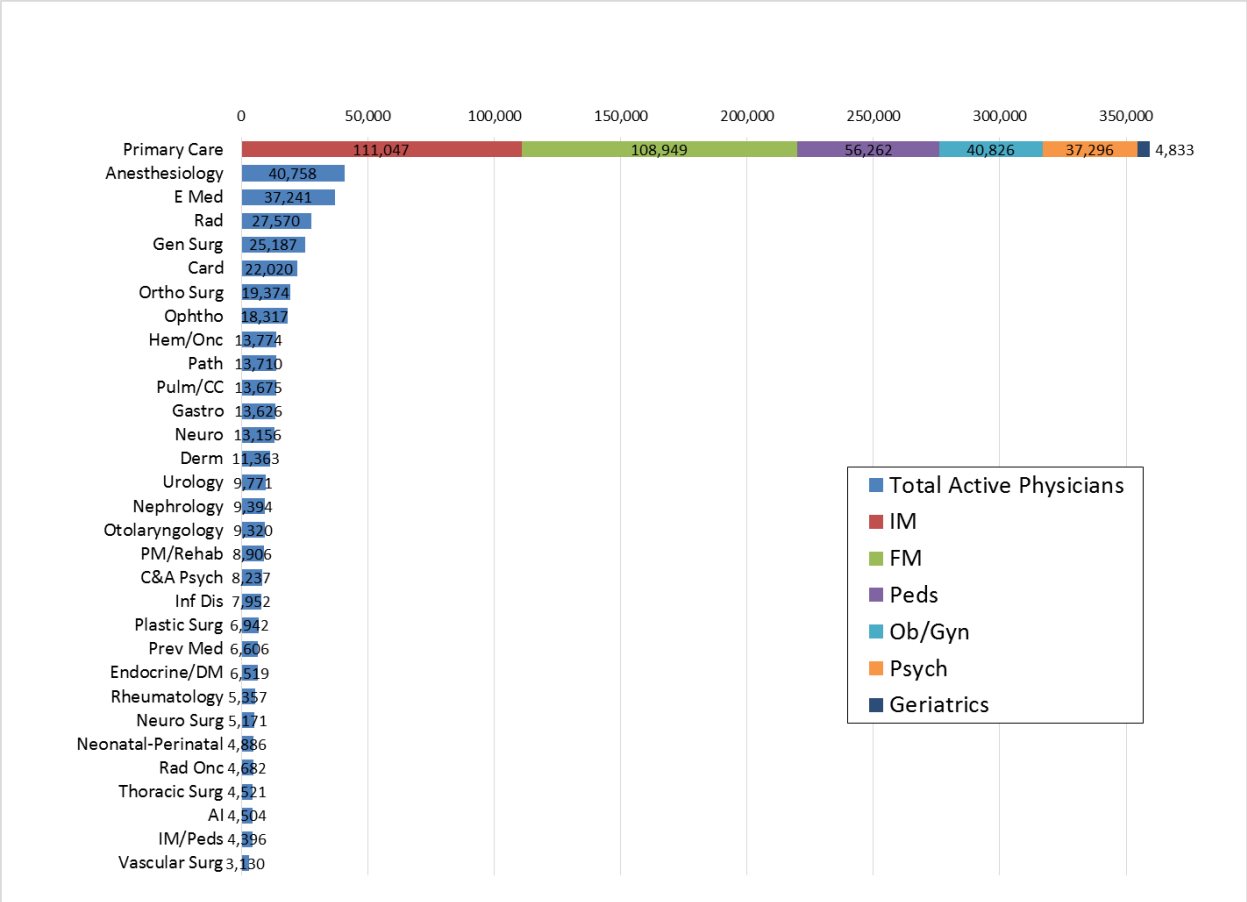
These changing demographics are the primary contributor to the physician shortages projected by the AAMC and other workforce experts across the country. Thus, the AAMC cautions that attempts to increase physicians in targeted specialties by reducing training of other specialists might ultimately *impede* access to care.

It is important to point out that many analyses—including the committee's report—assess trends in specialty composition by aggregating more than 100 specialties in their comparisons to primary care. This practice can lead to misleading conclusions, because the heterogeneity among the varied specialty disciplines makes it impractical to make a sweeping statement about the appropriateness of their growth. As illustrated in Figure 9, when these "specialist" positions are

considered independently, the numbers are far less dramatic, particularly when compared to the number of practicing primary care physicians.

Currently, approximately half (or 13,000) of first-year residency training positions are in family medicine, internal medicine, and pediatrics [#61]; while many of these residents will go on to subspecialize, the number of fellowship (or subspecialty) training positions accounts for approximately 20 percent of all available GME slots. Attempting to force physicians to forgo subspecialty training by limiting fellowship opportunities would have limited effect and, even if successful, would jeopardize timely access to care for patients who require a subspecialist. Preserving workforce flexibility at the regional and local levels is the best way to ensure that organizations can continue to fulfill the multifaceted health needs of our aging nation, including, but not limited to, primary care.

Figure 9: Total Active Physicians by Largest Specialties, 2014



Source: AAMC Center for Workforce Studies

Additionally, the AAMC strongly agrees with the committee's observation on page 2-2 that clinical reimbursement and the practice environment are powerful influences in determining the specialty mix of physicians, and in fact are "far more important than GME" in this regard. This conclusion is further supported by failed attempts to influence specialty selection through Medicare GME payments. Since the mid-1990s, hospitals have received twice the DGME payment for primary care and geriatrics residents as compared to subspecialty fellowships, yet

shortages in these areas persist. As observed by MedPAC in its November 2003 report on the Impact of Resident Caps on the Supply of Geriatricians, "[f]actors other than Medicare's resident caps may better explain the slow growth in the number of geriatric physicians" [#45]. The report further notes that "federal policies intended to affect the number, mix, and distribution of the health care workforce should be implemented through specific targeted programs rather than through Medicare." The committee mentions some of these programs in its report.

National Health Service Corps and Other Federal Loan Repayment Programs
Administered by HRSA, the NHSC provides scholarships and loan repayment to health professionals in exchange for practicing primary care in federally designated health professions shortage areas (HPSAs). As the report affirms (pg. 3-19), the program is widely recognized—both in Washington and in the underserved areas it helps—as a success on many fronts. The NHSC improves access to health care for the growing numbers of rural and urban underserved Americans, provides incentives for practitioners to enter primary care, and reduces the financial burden that the cost of health professions education places on new practitioners.

With the ACA's mandatory funding for NHSC set to expire at the end of fiscal year (FY) 2015, the program is in jeopardy. The AAMC, as a member of the NHSC Stakeholders, supports further expanding the NHSC to supplement existing health professions training investments. A funding approach that includes both mandatory and discretionary funding ensures annual flexibility with out-year stability. The AAMC further requests that any expansion of NHSC eligible disciplines or specialties be accompanied by a commensurate increase in NHSC appropriations (while also preserving the full spectrum of other federal health care workforce programs), so as to prevent a reduction of awards to current eligible health professions.

The AAMC also recommends expanding the authorization of the NHSC State Loan Repayment Program (SLRP) to allow states to define eligible sites and additional primary care needs. The NHSC SLRP provides matching funds to more than 30 states to operate their own loan repayment programs for primary care clinicians working in HPSAs. However, these funds are limited to the same specialties and underserved locations as the federal NHSC loan repayment program, providing states little opportunity to address workforce shortages unique to their situations. States are reluctant to commit additional funding from already-strained state budgets when significant increases in the federal NHSC programs can be used for identical purposes. With expanded SLRP authority, states can help appropriately identify sites that provide care to populations residing within HPSAs and direct funding to address their unique workforce needs.

While the NHSC is a critically important federal program, it is no more so than the Armed Forces health professions scholarship and loan repayment programs, the VA Education Debt Reduction Program, the Indian Health Service, and Department of Education's Public Service Loan Forgiveness program. These programs help students from all backgrounds attend medical school and serve as an important recruitment mechanism.

It is also important to note, "A common assumption about specialty choice is that education debt plays a key role—specifically, pulling physicians away from the relatively lower-paying primary care fields and toward the more lucrative specialties. However, the scientific literature includes

no definitive proof that education debt significantly influences the career choices of most medical students and residents. Some research suggests that debt may have a marginal influence but that it is typically overwhelmed by other factors, including demographics, personal interest in a specialty's content and/or level of patient care, desire for the 'controllable lifestyle' offered by some specialties, and exposure to a strong role model in a specialty" [#72].

Title VII Health Professions Programs

In addition to the NHSC, other HRSA programs have proven successful in guiding students toward a career in primary care and underserved communities. The Title VII health professions programs offer support for educational opportunities in these settings. The programs serve as a catalyst for innovations in education and training, helping the workforce adapt to the nation's changing workforce needs over the programs' 50-year history. The AAMC observes that despite the explicit request of four of the report's requesting senators (pg. B-5), the committee neglects, except for one single sentence, to address the role of the Title VII programs in achieving the committee's goals (pg. 3-21).

The programs authorized under Title VII of the Public Health Service Act are designed to provide education and training opportunities in high-need areas to aspiring health care professionals. With a focus on primary care, they are designed to train providers in interdisciplinary, community-based settings to meet the needs of the country's special and underserved populations, increase diversity of the health care workforce, and fill the gaps in the supply of health professionals not met by traditional market forces.

For example, in light of the nation's rapidly growing population of older adults, recent Title VII grantees are focusing on interprofessional training in geriatrics for non-geriatric health professionals, as well as effective care transitions and chronic care management for seniors. Additionally, several Title VII geriatric-focused grantees are dedicated to education and training around Alzheimer's disease, with an emphasis on prevention and early intervention.

Title VII grantees also are closing the gaps between primary care and oral, mental, and behavioral health by training providers in interprofessional settings and testing best practices for integration and delivery of these important services, with a focus on access for underserved populations.

In addition to the Title VII primary care medicine programs, the Title VII Area Health Education Centers (AHEC) program, which provides interprofessional, community-based training opportunities, trained more than 21,353 health professions students in rural and/or underserved communities in the 2012–2013 academic year alone. AHECs also provide academic enrichment to students and continuing education to providers on a variety of topics, including cultural competence, health disparities, diabetes, and issues affecting veterans. In the same academic year, AHECs delivered continuing education on similar topics to over 216,000 health care providers nationwide [#73].

The report expresses concern about the geographic maldistribution of providers (e.g., pgs. 2-13 and 2-14); HRSA data from the 2012–2013 academic year show the number of Title VII participants who practice in a medically underserved community (MUC) and/or a HPSA after

graduation is increasing. Across programs in HRSA's former Bureau of Health Professions, 43 percent of graduates entered practice in underserved areas, exceeding the target by 10 percent. Additionally, individuals who participate in Title VII programs are significantly more likely to join the NHSC and/or work in community health centers, making the Title VII programs an important mechanism to connect primary care providers to careers in underserved areas [#74].

Notably absent from the committee's report is an initiative funded by the ACA to support primary care residencies. Authorized under Title VII, the Primary Care Residency Expansion Program (PCRE) is a $168 million competitive funding opportunity supporting the addition of new residents in family medicine, general internal, and general pediatric medicine residency programs. The program provided $80,000 per resident per year to be spent over a five-year period [#75].

Eligible applicants included public or nonprofit private hospitals, schools of medicine or osteopathic medicine, or any public or private nonprofit entity identified by the Secretary of the Department of Health and Human Services (HHS). However, a funding priority was given to programs that conduct training in community-based settings, including rural health clinics, community health centers, community hospitals, and critical access hospitals.

Like the ACA-established Teaching Health Center (THC) program, funding for the PCRE program was time-limited to five years. Even so, applications exceeded the number of awardees. In 2010, HRSA reviewed 157 applications and funded 82 programs in 28 states. In total, the PCRE programs are expected to enroll an additional 900 primary care residents through 2016 [#75].

The Title VII diversity programs play an instrumental role in producing a diverse workforce equipped to mitigate racial, ethnic, and socioeconomic health disparities. For example, the most recent data show that the diversity pipeline Health Careers Opportunity Program (HCOP) trained 6,418 disadvantaged students, exceeding their target by 31 percent and helping to create a more competitive diverse applicant pool to health education programs [#73]. Further, HRSA estimates that three out of four HCOP participants are considered underrepresented minorities and approximately nine out of 10 participants come from a financially or educationally disadvantaged background [#73]. As the committee describes (pg. 2-12), though challenges remain in addressing workforce diversity, some progress has been made, in part due to programs like those supported under Title VII.

The Title VII programs continually have demonstrated success in producing diverse, culturally competent primary care providers prepared to serve in the areas they are needed most. Moreover, the programs continue to be at the forefront of advancing changes in health professions training and education as described above. The AAMC strongly supports robust funding for the programs. Though most of the Title VII programs do not provide direct support for residency training, their track record in catalyzing medical education innovations for the changing health care system directly aligns with the committee's stated vision for the health care workforce of the future.

Teaching Health Centers

The THC program is a more recent HRSA initiative, established by the Affordable Care Act and funded with a mandatory appropriation through FY 2015. The law requires programs to meet the same accreditation criteria as other residency programs, and HRSA allows THCs to satisfy this requirement through participation in a consortium that includes a hospital/other entity that is listed as the institutional sponsor (provided that the funding goes directly to the THC, not the sponsor).

Until recently, the THC program provided payments of $150,000 per resident, per year to community-based, ambulatory patient care centers that operate primary care residency programs. These payments were nearly double the $80,000 payments provided to participants of the recent PCRE program, and similarly, at a far higher level than Medicare supports teaching hospitals. Under the ACA, HRSA was directed to develop a formula to determine payments to THCs, using the otherwise arbitrary $150,000 per resident, per year figure only temporarily until such a formula was finalized. Despite convening an expert panel to draft a formula, to date HHS has not released the formula for public comment, relying instead on the interim payments. HRSA recently announced that payments for the final year of the program will be $70,000 per resident [#76], a funding level that still exceeds Medicare payments for teaching hospitals' direct expenses.

The report acknowledges that a comprehensive evaluation of the THC program has not yet been completed: "It is too soon to know if training in these sites will ameliorate some of the readiness issues and evaluation of these outcomes is important" (pg. 2-12). At the same time, the report characterizes the program as "[o]ne of the key workforce provisions of the ACA" and recommends automatic eligibility of THCs for funding through the committee's proposed Operational Fund (pg. 5-25).

Given the committee's stated goal of increasing transparency and accountability of federal GME funds, it is surprising that the committee would propose automatic Medicare funding for such facilities before outcomes from the initiative can be fully evaluated. This type of evaluation will be critical to informing improvements to the program if it is to continue. For example, a recent report profiled the highly successful Northwestern McGaw Family Medicine Residency, the THC grantee frequently highlighted for its approach to training. Among the characteristics of the program's success, the profile describes that the Northwestern THC "is distinct from other Teaching Health Centers in its three-part mission that includes research, leadership, and community-based health care" [#77]. Additionally, the profile explains that because of "the unique characteristics, community, and resources at Northwestern and Erie Family Health Center, leadership hesitates to say the program could be replicated elsewhere" [#77]. A rigorous, impartial analysis of all THCs will help to identify attributes like these that contribute to the optimal outcomes that all programs seek.

The AAMC continues to support HRSA funding for the THC program, given that the agency oversees the federal health center program, health professions workforce development programs, and other community-based entities. We look forward to studying the outcomes of the initial cohort of THCs, and how continued HRSA funding can sustain the higher payments made to these facilities. However, as described above, we strongly object to the committee's proposal to divert Medicare funding to entities like THCs that do not care for substantial numbers of Medicare beneficiaries.

6

ACADEMIC MEDICINE ACTIVELY RESPONDING TO THE NATION'S HEALTH NEEDS

Summary of this Section:

- Medical educators are advancing innovations across the continuum of education and training to reflect the changing context of care delivery.
- Both new and existing medical schools have implemented initiatives to address emerging national and local health care needs, such as primary care, rural experiences, and others.
- The education and training of physicians and other health professionals has changed significantly in the last 15 years and continues to change, with increasing focus on competency-based rather than time-based education and on teaching doctors to improve systems of care.
    - Initiatives are underway to enhance admissions processes, policies, and practices to better identify, select, and train tomorrow's doctors for the health care system of the future.
    - Changes to the MCAT® exam incorporate medical advancements, changes to the health care system, and the increasing diversity of the population.
    - In graduate medical education (GME), a pilot project is testing the feasibility of moving away from a "one-size-fits-all" model of time-based advancement to competency-based advancement across the continuum from medical school through residency and practice in pediatrics.
    - The AAMC is among six health professions education associations working through the Interprofessional Education Collaborative to better integrate and coordinate the education of health professionals to provide more collaborative and patient-centered care.
- In addition to innovations in medical education, major teaching hospitals are at the forefront of leading innovations in health care delivery.
- No environment is better suited to and more committed to preparing the physician workforce for the health care system of the future than the very institutions pioneering such transformations.

At both the national level and at individual institutions, medical educators are implementing innovations across the continuum of education and training to reflect the changing context of care delivery. Although the report characterizes efforts in undergraduate medical education as "beyond the scope of this study" (pg. S-2), the AAMC concurs that this additional context is "needed" and important to consider in assessing the medical education community's progress toward the committee's goals.

Emphasis of New Medical Schools

In 2005, the Liaison Committee on Medical Education (LCME) fully accredited a new medical school for the first time since 1986, bringing the total number of medical schools to 125. After two decades of no growth, the total number of medical schools today stands at 141, paralleled by increases in class sizes at existing medical schools. The growth in medical education programs predates enactment of the Affordable Care Act (ACA), reflecting a recognition that the baby boomers soon would confront ailments common to old age and that the physician supply would not be sufficient to meet their needs.

Guided by both the benefit and challenge of building a new educational program from scratch, the new medical schools are proving eager to pursue curricular innovations to help address both

national and local needs, many of which align with the priorities identified by the committee. Prevalent themes among this new cohort (and among existing schools that are transforming their curricula) include early clinical experiences for students, curricular structures that integrate the basic and clinical sciences, emphasis on interprofessional educational opportunities, and case-based learning. Schools also are reporting innovative approaches to advancing their specific missions, such as Cooper Medical School of Rowan University, which requires students to complete 40 hours annually of non-medical community service in the school's seriously economically depressed neighborhood of Camden, N.J. While the mission of each medical school necessarily differs, many of the new schools report an emphasis on primary care.

Profiles of these new institutions are featured in the November 2012 AAMC report, *A Snapshot of the New and Developing Medical Schools in the U.S. and Canada* [#78]. Continued study and analysis of their efforts over time will help inform opportunities to further shape medical education and the culture of medical practice.

Efforts Underway at Existing Institutions

Existing medical schools also have implemented creative initiatives to address challenges as they evolve, including some specifically targeted to promoting primary care. In a 2010 survey of medical school deans, 75 percent (94 of 125 respondents) reported plans to institute programs or policies to encourage student interest in primary care [#79]. Two-thirds of those 94 schools reported refined admissions criteria and 60 percent reported expanded primary care faculty and/or resources. Most also reported new or expanded extracurricular opportunities (87 percent); new, expanded, or modified clinical rotations (74–73 percent); modified pre-clinical curricula (71 percent); and other activities (19 percent).

The Duke University School of Medicine officially launched the Primary Care Leadership Track in 2011 after a two-year pilot phase, and the first cohort of students will graduate in 2015. The program combines community service and leadership training and requires a year of community-engaged research, with a goal of preparing physicians to work with and learn from communities to improve care delivery and produce better outcomes [#80]. Similarly, the University of California, San Francisco (UCSF), School of Medicine administers the Program in Medical Education for the Urban Underserved (PRIME-US), an effort that is not a dedicated primary care track, though the majority of participants enter primary care disciplines [#81]. The program aims to produce leaders to care for urban underserved communities and embeds community-based participatory research among students' experiences.

Some medical schools have established rural or small-town regional campuses that serve as fully functional branches of the main campus. Groups of students receive their entire four years of undergraduate medical education, or the bulk of their clinical experience, at the rural site. For example, the Columbia University College of Physicians and Surgeons in New York began accepting students in the fall of 2011, for a new rural medicine track in partnership with Bassett Healthcare System in the upstate New York village of Cooperstown. For the first 18 months of medical school, students in the Columbia-Bassett program attend core "foundations of medicine" classes at Columbia's northern Manhattan campus, then move to Cooperstown, a town of less than 2,000, for longitudinal clinical experiences. The University of Kansas School of Medicine

and the Texas Tech Health Sciences University in Lubbock—among others—have similar programs.

Other institutions are building new models for primary care in the face of changing demographics and health care challenges. The Warren Alpert Medical School of Brown University is developing a dual-degree Primary Care and Population Health program to ensure graduates understand the clinical, behavioral, and public health contexts of patient care. Expected to begin in fall 2015, the four-year M.D./Sc.M. program would allow students to follow patients through their various interactions with the health care system by engaging in nine-month, physician practice-based clerkships. The experiences are designed to help students learn not only the medical knowledge necessary for quality care, but also public health policy, leadership skills, and familiarity with practice as part of a broader patient-care team.

In GME, too, a number of institutions have successfully incorporated key attributes of the Patient-Centered Medical Home (PCMH) model of care into their delivery system while serving as a training site for medical residents and other health professionals. In early 2010, the AAMC, in collaboration with representatives of the Society of General Internal Medicine (SGIM) and the American College of Physicians (ACP), designed a survey distributed to AAMC-member institutions, asking participants to identify residency programs that have integrated into their care system infrastructural or workforce transformations commonly associated with the medical home [#82]. Respondents to the survey described a high level of team-based care consisting of physician and non-physician clinicians, as well as care coordinators, social workers, PharmDs, and nutritionists. Practices also noted enhanced access and communication, significant quality monitoring and improvement activities, and near unanimous access to electronic health records technology. Seven high-performing practices were profiled in the AAMC's November 2010 publication, *Moving the Medical Home Forward: Innovations in Primary Care Training and Delivery* [#82].

The Emphasis of Each Institution Varies by Necessity

The examples cited here are by no means exhaustive. While all medical schools are committed to producing primary care physicians in accord with the nation's needs, it also is important to note that each medical education program is responsible for establishing a curriculum aligned with its own institutional missions and educational objectives within the framework of general competencies required for accreditation by the LCME.

The LCME's recognition of "the existence and appropriateness of diverse institutional missions and educational objectives" is critical to ensuring that the medical education enterprise is multifaceted enough to respond to a comprehensive array of the public's needs. Medical schools and teaching hospitals serve society in many ways—they conduct groundbreaking medical research that helps address the health needs of all patients; they provide vital community services such as geriatric care, nutrition counseling, health clinics, and free screenings for the uninsured and underinsured; and they work to improve medical care not only for Americans, but also for disadvantaged populations globally. Measuring their contributions to society solely through their efforts to cultivate interest in one particular discipline or one priority area overlooks the vital role that many of these institutions play in advancing other essential components of quality health care.

Transforming Medical Education
Beyond innovations related to the content of medical curricula, academic medicine also is changing the way in which medical education is carried out.

For example:

- With guidance from the AAMC, several medical schools are testing new ways to use their admissions processes to better identify, select, and train tomorrow's doctors for the health care system of the future. The AAMC Admissions Initiative is a broad effort to help medical schools change the admissions process to consider personal characteristics in addition to academic metrics. Central to the effort is selecting students based on competencies rather than grades and test scores alone. Admissions committees look for several factors, including how well applicants work in teams, how they interact with diverse people, and their ability to be resilient, adapt to different situations, and to think critically.

- Similarly, the AAMC Holistic Review Project, established in 2007, focuses on processes, policies, and practices that will help foster and enrich diverse, inclusive, and collaborative learning and working environments. Holistic review is a flexible, individualized way of assessing an applicant's capabilities with balanced consideration of experiences, attributes, and academic metrics. When considered in combination, admissions committees are able to see how the individual might contribute value as a medical student and physician. More than one-third of medical schools use holistic reviews in the admissions process.

- In November 2011, the AAMC and a 21-member advisory committee completed a comprehensive review of the MCAT exam, which is designed to test the knowledge and skills tomorrow's doctors will need. The concepts tested are a reflection of medical advancements, changes to the health care system, and the increasing diversity of the population. Balancing two natural science tests are two new sections. One new section on "Psychological, Social, and Biological Foundations of Behavior" reflects the need for tomorrow's physicians to understand how behavior interacts with biological factors to influence health outcomes and how social inequities impact a patient's health. A second new section, "Critical Analysis and Reasoning Skills," is designed to test students' reasoning ability through analysis of passages from social science and humanities disciplines, including ethics and philosophy, cross-cultural studies, and population health. This was the fifth comprehensive review of the exam since it was first administered in 1928.

- In GME, as the committee may be aware, the AAMC's Education in Pediatrics Across the Continuum (EPAC) project received a three-year grant from the Josiah Macy Jr. Foundation. The grant is intended to support a pilot testing the feasibility of moving away from a "one-size-fits-all" model of four years of medical school plus three years of residency to competency-based advancement across the continuum from medical school through residency and practice (or fellowship) in pediatrics. Four pilot sites are

participating in the initiative. Using a framework of Entrustable Professional Activities, the students will advance as they achieve expected performance metrics at each level. EPAC will continue for at least seven years, with a minimum of four student cohorts. This pilot, like several other initiatives underway, will help inform medical education and training more broadly as we work to change the paradigm.

- The AAMC also partnered with five other health professions education associations to found the Interprofessional Education Collaborative (IPEC) in February 2012. This work focuses on better integrating and coordinating the education of nurses, physicians, pharmacists, dentists, public health professionals, and other members of the patient care team to provide more collaborative and patient-centered care. Supported by funding from the Macy Foundation, IPEC has published *Core Competencies for Interprofessional Collaborative Practice*, which identifies individual-level core competencies needed by all health professionals to provide integrated, high-quality care, and provided team-based faculty development to improve preparation for collaborative practice [#83]. Additionally, the group created an online "Inteprofessional Portal" on AAMC's free, Web-based MedEdPORTAL® database. The resource will serve as a national clearinghouse of high-quality, peer-reviewed, competency-based learning modules for interprofessional education and models of team-based or collaborative care. The group has sponsored six faculty development institutes; interest in the programs has been so strong that registration reaches capacity only hours after opening.

- The AAMC recently developed new guidelines, *Core Entrustable Professional Activities (EPAs) for Entering Residency*, with the goal of improving patient care and safety and in response to feedback from residency program directors about the clinical preparedness of entering residents [#84]. The guidelines are based on emerging literature documenting a performance gap at the transition point between medical school and residency training. The document represents the first formal outline of the activities and requisite competencies and behaviors that every graduating medical student should be able to perform on day one of residency training, without direct supervision. The guidelines standardize the expectations for both learners and teachers and include 13 activities that all medical graduates should be able to perform regardless of their future career specialty. After receiving applications from more than 70 AAMC member institutions, 10 medical schools were selected to participate in a five-year pilot to test implementation. An additional component of this project is the development of a robust learning community in partnership with additional member schools that are beginning to implement the guidelines. Resources and lessons learned will be shared broadly.

- The AAMC and the other five IPEC organizations also are founding members of the IOM's Global Forum on Innovation in Health Professional Education, which held its first public planning meeting in March 2012. Inspired in large part by the 2010 Lancet Commission Report, *Health Professionals for a New Century* [#85], this forum convenes stakeholders to illuminate issues in health professions education and support an ongoing, innovative mechanism to incubate and evaluate new ideas.

The training of physicians and other health professionals has changed significantly in the last 15 years and continues to change, with increasing focus on teaching doctors to improve systems of care. As new performance metrics are created, tested, and evaluated, these data will demonstrate the increasing ability of new physicians to work in teams, facilitate system changes to improve population health, and foster continuous quality improvement in care delivery.

Transforming Care Delivery

Aside from innovations in medical education, major teaching hospitals also are at the forefront of leading innovations in health care delivery. AAMC institutions and faculty are working with the federal government to improve delivery and payment, and helping to shape reforms at the state level. Though AAMC-member institutions account for 5 percent of all hospitals, they constitute a far larger percentage of participants in payment and delivery reform programs sponsored by CMS. For example, AAMC members made up 45 percent of Health Care Innovation Award grantees; 34 percent of the Innovation Advisors Program; 18 percent of all CMS Accountable Care Organizations (ACOs); 38 percent of Pioneer ACOs; and 17 percent of Medicare Shared Savings Program participants [#86]. As of July 2014, AAMC-member medical schools and teaching hospitals represented two-thirds of all awardees receiving Patient-Centered Outcomes Research Institute (PCORI) funds. Among PCORI's focus areas of addressing disparities, communicating/disseminating research, and health systems improvement, AAMC members represented more than 70 percent of the funded projects [#87].

In addition to efforts by AAMC members, the AAMC itself received an official Notice of Award from the Center for Medicare and Medicaid Innovation to begin a three-year project. The initiative will disseminate a model of care aimed at improving the quality of care and the patient experience, while reducing the overall cost of care by enhancing communication and coordination between primary care and specialty physicians in the ambulatory setting. Initially developed by the University of California, San Francisco, the project began at five academic medical centers throughout the country.

Medical schools' and teaching hospitals' leadership in propelling such innovations in care delivery goes hand-in-hand with the educational experience for the next generation of physicians. No environment is better suited to and more committed to preparing the physician workforce for the health care system of the future than the very institutions pioneering such transformations.

8

AAMC Physician Workforce Policy Recommendations

Summary of this Section:

- The AAMC offers the following recommendations to clarify that an adequate supply of physicians must be achieved both through more efficient health care delivery models and by increasing physician training positions. No single approach is sufficient.
- The number of federally supported graduate medical education (GME) training positions should be increased by at least 4,000 new positions a year to meet the needs of a growing, aging population and to accommodate the additional graduates from accredited medical schools.
- Current and future targeting of funding for new residency positions should be planned with clear attention to population growth, regional and state-specific needs, and evolving changes in delivery systems. Attempts to increase physicians in targeted specialties by reducing training of other specialties will impede access to care.
- In addition to expanding support for GME, policymakers should leverage clinical reimbursement and other mechanisms to affect geographic distribution of physicians and influence specialty composition.
- The federal government should continue to invest in delivery system research and evidence-based innovations in health care delivery.
- In conjunction with these recommendations, the AAMC endorses legislation such as H.R. 1201, which applies enhanced accountability and transparency to better quantify and strengthen Medicare's ongoing investment in physician training.

Despite the best-implemented health care delivery reforms, the growing and aging nation will need a larger physician workforce. Like any projections, exact predictions of the required supply to meet the future demand for physicians remain elusive; such projections offer tremendous value nonetheless in informing policymakers on the general magnitude of expected shortfalls in either supply or demand.

While the committee could not reach consensus acknowledging the shortages, there are some known variables that can help mitigate the uncertainty associated with workforce planning. For example, the demographics of the population—and of the existing physician workforce—threaten to strain the existing health care system such that the number of physicians per capita will drop. To put this dynamic in context, consider that the United States already has fewer practicing physicians per capita than the average for member countries of the Organisation for Economic Co-operation and Development (OECD), and only four OECD countries graduate fewer physicians per 100,000 inhabitants than the United States [#88]. Regardless of how much additional efficiency is successfully introduced to the health care system, the United States should not let its capacity to care for patients drop further.

The country cannot afford to wait until the physician shortage takes full effect, as the education and training of each physician takes more than a decade. The policy recommendations that follow are intended to clarify that an adequate supply of physicians must be achieved both through more efficient health care delivery models and by increasing physician training positions. No single approach is sufficient; all of the following are necessary to ensure an adequate supply of physicians. In conjunction with these recommendations, the AAMC endorses

legislation such as H.R. 1201, which applies enhanced accountability and transparency to better quantify and strengthen Medicare's ongoing investment in physician training.

1. The number of federally supported GME training positions should be increased by at least 4,000 new positions a year to meet the needs of a growing, aging population and to accommodate the additional graduates from accredited medical schools. The medical education community will be accountable and transparent throughout the expansion.

Training an additional 4,000 physicians a year would allow the nation to increase its expected supply of doctors by approximately 30,000 by the end of the decade—meeting approximately one-third of the expected shortage. This represents an expansion of approximately 15 percent over current training levels, which would provide a sufficient number of positions to accommodate U.S.-educated doctors while allowing for international medical graduates (IMGs) to occupy about 10 percent of training positions. Absent the necessary increases in residency positions, per capita numbers of physicians will continue to fall as the population grows and ages with rising per capita needs.

The AAMC believes that primary care is the foundation of a high-performing health system, but it is equally important to increase the supply of subspecialists in many areas. As patients age, incidence of both chronic and acute conditions rises dramatically; U.S. health care has made great advances in the care of these conditions. Cancer, arthritis, diabetes, and other adult illnesses will continue to be treatable disorders that require the care of oncologists, surgeons, endocrinologists, and other specialties. Children who previously would have succumbed to their illnesses will survive into adulthood but require decades of follow-up by primary care, pediatric subspecialists, and adult subspecialists. Meeting these needs cannot be accomplished without increasing the number of residency positions.

2. Current and future targeting of funding for new residency positions should be planned with clear attention to population growth, regional and state-specific needs, and evolving changes in delivery systems. Today, approximately half (2,000) of these additional positions should be targeted to primary care and generalist disciplines; the remainder should be distributed across the dozens of the approximately 140 other specialties that an aging nation relies upon. Attempts to increase physicians in targeted specialties by reducing training of other specialists will impede access to care.

Approximately half (or 13,000) of first-year residency training positions are in family medicine, internal medicine, and pediatrics; while many of these residents will go on to subspecialize, the number of fellowship (or subspecialty) training positions accounts for approximately 20 percent of all available GME slots. Even the largest internal medicine subspecialty, cardiology, trains fewer than 1,000 physicians a year; fewer than 500 oncologists are trained annually. Attempting to force physicians to forgo subspecialty training by limiting fellowship opportunities would have limited effect in addressing primary care shortages and, even if successful, would jeopardize timely access to care for patients who require a subspecialist.

Wait times for access to subspecialists continue to grow, necessitating that, in some cases, training capacity must be increased, combined with efforts to more efficiently use subspecialty care. The AAMC believes that the ideal team-based health care delivery and utilization model should efficiently use human resources to improve patient access to appropriate services. For example, some patients managed by specialists can be directed back to primary care providers with management plans for chronic conditions. Other providers in a variety of settings could care for lower acuity patients now treated by physicians. Optimizing utilization will help relieve both the burden on patients seeking to access appropriate health care services and on overwhelmed providers, but will not obviate the need to train more doctors.

Physician shortages will persist even if the Medicare funding caps are lifted today, given the severity of the problem and a likely modest rate of change in the delivery and payment systems. Increasingly, patient access to both primary and specialty care will be a challenge. As health care is better integrated—team care expands and unnecessary variations are reduced—newly insured patients will present in the offices of primary care providers. For many of those patients, primary care providers will need to coordinate the care of subspecialists for complex illnesses. These needs will outstrip the supply of many subspecialties at current levels, even if utilization rates are significantly reduced.

It is unclear how extensive this increase in utilization will be over the course of subsequent years. Therefore, it is imperative to target the current and future increase in federally funded residency positions through ongoing analysis of health care utilization and estimates of future demand, rather than by prescribing a static specialty composition that does not actively respond to a dynamic health care environment.

3. In addition to expanding support for GME, policymakers should leverage clinical reimbursement and other mechanisms to affect geographic distribution of physicians and influence specialty composition.

While the ACA took steps to increase reimbursement to primary care providers, policymakers will need to reimburse cognitive and patient management services in a way that makes these specialties more attractive to new physicians. Similarly, programs like NHSC and Title VII have successfully improved distribution of primary care providers to underserved areas, but policymakers must find ways to reward physicians economically who serve geographically or economically underserved communities. Education and training cannot overcome the intense market incentives that influence physician choices.

Recent studies show 31 percent of physicians are not accepting new Medicaid patients [#89]. Teaching hospitals and physician faculty are more likely to serve poor and vulnerable populations and will be asked to see more patients for whom reimbursement is less than the cost of providing care. Physicians and other providers must be paid adequately to ensure that patients have access to care.

4. The federal government should continue to invest in delivery system research and evidence-based innovations in health care delivery.

Lifting the 17-year freeze in federal support for physician training by 15 percent only would meet less than one-third of the expected shortage of physicians by the end of this decade, and is insufficient to ensure access to care. Delivery system innovations that improve efficiency, integrate care, and leverage other health professionals also will be necessary.

The ACA created new opportunities for health care delivery reform at the federal level and for the states, which are now in the beginning stages of implementation. AAMC institutions and faculty are working with the federal government to improve delivery and payment by participating in numerous initiatives. AAMC members are focused on the transformation of health care delivery, including through the Patient-Centered Outcomes Research Institute (PCORI).

AAMC teaching hospital members receive significant public funding for their missions and are willing to be meaningfully accountable for that support. The training of physicians and other health professionals has changed significantly in the last 15 years and is increasingly focused on teaching doctors to improve systems of care. As performance metrics are created, tested, and evaluated, these data will demonstrate the increasing ability of new physicians to work in teams; facilitate system changes to improve population health; and foster continuous quality improvement in care delivery.

Continued research will inform how providers, systems, and payers can ensure access to care as well as optimal outcomes. Along with the AAMC, the federal government should continually assess how these delivery changes affect workforce needs and make the necessary additional investments in training to provide an adequate physician workforce.

CONCLUSION

The health care system—and the demographic composition of the people who rely on it—is changing. So, too, must medical education. Medical schools and teaching hospitals nationwide are committed to advancing this transformation in a manner that prioritizes patient safety and access. Examples abound: evolving accreditation requirements, enhanced admissions processes, interprofessional educational opportunities, partnerships with ambulatory and community-based settings, and many more. Physician training today is adapting to prepare tomorrow's physician workforce to practice in tomorrow's health care system.

These efforts mark only the start, and continued innovations and investments will be necessary to realize the committee's vision of the future workforce. At the same time, it will be important not to undermine the ability of the current system to meet the needs of today's population.

In the wake of an unprecedented demand for health care services, communities in all regions of the country rely on academic medical centers for high-quality medical care, advanced research, new business development, and education of medical professionals. The unintended consequences resulting from many of the report's recommendations would jeopardize progress in these areas.

Rather than dismantling the existing infrastructure, the AAMC believes that patients, trainees, and the country would be better served by augmenting and enhancing physician training to determine the most appropriate ways to address any inefficiencies in the system. To be maximally effective, proposals should seek to supplement existing support, at least until the feasibility, quality, and effectiveness of new approaches can be assured. Any efforts to repurpose already limited resources only would be counterproductive in addressing persistent workforce shortages and patient care needs. The AAMC recommends an expansion of federal support for GME, and the medical education community is committed to being accountable and transparent throughout the expansion.

The AAMC appreciates the opportunity to submit these comments and looks forward to working with the committee toward our mutual goal of strengthening and enhancing support for medical education in the interest of improving health and health care for all.

REFERENCES

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APPENDIX A

	Teaching Hospital at/below its 1996 cap	Teaching Hospital above its 1996 cap	Federally Qualified Health Centers (FQHCs) and Rural Health Centers	Critical Access Hospital (CAH)
Information about the Provider	**Teaching hospital PRA** updated for inflation = $103,700 **DGME cost per trainee**= $152,000 **Medicare Share** = 40% because 40% of this hospital's patients are Medicare patients **Teaching hospital 1996 cap**= 25 FTEs **Teaching hospital FTE count**= 25 FTEs	**Teaching hospital PRA** updated for inflation = $103,700 **DGME cost per trainee**= $152,000 **Medicare Share** = 40% because 40% of this hospital's patients are Medicare patients **Teaching hospital 1996 cap**= 25 FTEs **Teaching hospital FTE count**= 40 FTEs	**DGME cost per trainee** = $152,000 **Medicare Share** = 40% because the ratio of Medicare visits to total # of visits = 40% **FQHC/RHCs number of trainees**= 25 FTEs **FQHC/RHCs direct graduate medical education costs**= $152,000 (DGME cost per trainee) x 25 (FQHC/RHCs number of trainees)= **$3,800,000**	**DGME cost per trainee** = $152,000 **Medicare Share** = 40% because the ratio of Medicare visits to total # of visits = 40% **CAH's number of trainees**= 25 FTEs **CAH's direct graduate medical education costs**= $152,000 (DGME cost per trainee) x 25 (CAH's number of trainees)= **$3,800,000**
Direct Graduate Medical Education Formula	Per Resident Amount x Medicare Share= Medicare Payment Per Resident	Per Resident Amount x Medicare Share= Medicare Payment Per Resident	The FQHC's DGME costs x Medicare Share (ratio of Medicare visits to total # of visits) = Medicare Payment Per Resident	101 percent of reasonable costs x Medicare Share = Medicare Payment Per Resident
Formula applied	$103,700 x 40% = **$41,480** payment per resident	$103,700 x 40% = **$41,480** payment per resident	$3,800,000 x 40%= **$1,520,000**	$3,800,000 x 40%= $1,520,000 x 101% = **$1,535,200**
Medicare Reimbursement per Resident	**$41,480**	**$41,480**	$1,520,000 ÷ 25 = **$60,800**	$1,535,200 ÷ 25 = **$61,408**
Total Direct Graduate Medical Education Costs	$152,000 (DGME cost per trainee) x 25 (Teaching hospital FTE count)= **$3,800,000**	$152,000 (DGME cost per trainee) x 40 (Teaching hospital FTE count)= **$6,080,000**	FQHC/RHCs direct graduate medical education costs= $152,000 (DGME cost per trainee) x 25 (FQHC/RHCs number of trainees)= **$3,800,000**	CAH's direct graduate medical education costs= $152,000 (DGME cost per trainee) x 25 (CAH's number of trainees)= **$3,800,000**
Total Medicare Reimbursement for Direct Graduate Medical Education	$41,480 (Medicare Reimbursement per resident) x 25 (Teaching hospital FTE cap)= **$1,037,000**	$41,480 (Medicare Reimbursement per resident) x 25 (Teaching hospital FTE cap)= **$1,037,000**	$3,800,000 x 40%= **$1,520,000**	$3,800,000 x 40%= $1,520,000 x 101%= **$1,535,200**
Difference between Total Direct Graduate Medical Education Costs and Total Medicare Reimbursement	$3,800,000 – $1,037,000 = **- $2,763,000**	$6,080,000 - $1,037,000 = **- $5,043,000**	$3,800,000 – $1,520,000 = **- $2,280,000**	$3,800,000 - $1,535,200 = **- $2,264,800**

APPENDIX B

TECHNICAL ERRORS & AREAS FOR ADDITIONAL CLARIFICATION

We believe the following statements from the committee's report could benefit from additional clarification.

- Page 3-5 – The report states that psychiatric and rehabilitation facilities receive IME payments. However, this is not accurate. They receive DGME payments plus a "teaching status adjustment," which is based on a different formula than IME. This adjustment comes out to being only a very small fraction of what an IME payment would be.

- Page 3-6 – OBRA of 1993 – The report states that the law "increases the PRA by about 6 percent for primary care and obstetrics trainees in 1994 and 1995." The text continues, "In addition: the inflation adjustment is withheld for non-primary care specialties for 2 years." This characterization implies the law did two different things. It did *not* increase primary care PRAs. Rather, it stopped the inflation adjustment for non-primary care PRAs for two years, which led to primary care PRAs being higher over time.

- Page 3-6 – The last bullet says, "The PRA for advanced training in preventive medicine trainees is increased from .5 to 1.0." However, it is not the PRA that was increased – it is the FTE *weight* for DGME payment purposes that was increased.

- Page 3-7 – BBA 1997 – The last line in the box says that "previously, the allowable DME costs were limited largely to training activities in hospital settings." We believe the committee intended to say "DGME allowable *time*" here, rather than "DME costs."

- Page 3-8 – Medicare Prescription Drug…Act of 2003 – The report states, "Residents in geriatric training count as full-time equivalents for 2 years of training." This statement is not clear. Perhaps the committee intended to say, "count as 1.0 full-time equivalents for 2 additional years of training," or a similar statement?

- Page 3-9 – The last paragraph of the page appears to conflate DGME payments with DGME PRAs, which makes the paragraph unclear. The section reads:
    - "Safety net hospitals (i.e., those with a high LIPP), for example, tend to have relatively low Medicare ratios and, thus, low Medicare DGME PRAs." Did the committee intend to discuss "DGME payments" here rather than "PRAs"? An institution's Medicare ratio is not related to its PRA.
    - "In 2008, the average Medicare PRA for safety net hospitals with the highest LIPP (65 percent or greater), was only $25,306, while for hospitals with a 15 to 25 percent LIPP the average was $46,857, more than 85 percent higher." Again, it is not clear whether the committee intended here to discuss the "PRA" or the "average DGME payment." Is the problem the PRA or the Medicare share?

- Page 3-10 – Table 3-2 appears to use Medicare data, which suggests that the committee intended to label column 3 as "Number of Resident FTEs," rather than "Number of

Residents." These two labels have different meanings.

- Page 3-11 – There are several unclear statements in the section entitled "Specialty Hospitals."
    - The report says long-term care hospitals (LTCHs) are eligible for DGME payments under the same rules as acute care teaching hospitals. However, LTCHs are not eligible for *any* Medicare GME payments.
    - The report says critical access hospitals are eligible for DGME payments under the same rules as acute care teaching hospitals. This is not accurate. As the paragraph later states, CAHs receive 101 percent of costs for GME.
    - The report says that "rehabilitation and psychiatric hospitals and units receive an explicit IME adjustment." However, as described earlier, this is not accurate. They receive DGME payment plus a "teaching status adjustment," which is based on a different formula than IME. This adjustment comes out to being only a very small fraction of what an IME payment would be.
    - The report says children's hospitals are paid on a reasonable cost basis. This is inaccurate.

- Page 3-23 – Though the IOM committee was "not able to obtain data on the costs and financing of military GME programs," the GAO reports that in FY 2012, the Department of Defense trained 2,706 physician residents and fellows at a cost of $16.5 million. Please see http://www.gao.gov/assets/660/656960.pdf, page 30.

- Page 4-9 – The report says that board certification "does not qualify programs for federal GME funding." However, this statement is inaccurate. Having a specialty's board examination approved by the American Board of Medical Specialties (ABMS) is one of the ways Medicare permits a program to be "approved" for Medicare funding.

- Page 5-25 – It is not clear why the report characterizes psychiatric facilities among "other types of training sites" (along with cancer and long-term care hospitals). Psychiatric hospitals currently receive DGME funding (as well as a teaching-status adjustment).

- Page E-1 and page E-4 – It is not clear exactly which year's cost report and how many hospitals are included in the committee's analyses.
    - In the first paragraph of Appendix E, the report says the analyses presented in Appendix F are "based on Medicare cost reports for the latest cost reporting periods beginning on or after May 1, 2010, as of the December 31, 2012, update of the Healthcare Cost Report Information System (HCRIS)." Additionally, "The final analytic file included 207 cost reports beginning in fiscal year (FY) 2010 (mainly beginning on July 1, 2010) and 885 cost reports beginning in FY 2011 (beginning on or after October 1, 2011)."
    - The last paragraph of Appendix E (page E-4) says, "The comparison of 2008 GME costs and payments included the 1,103 hospitals that reported both GME costs and a 2008 resident count for purposes of direct GME payments."

- Page E-2 – In 1(a), the report describes "Total Medicare DGME payments" as equal to the "sum of Part A allocation (WS E, line 49) and 80 percent of Part B allocation (0.8* WS E, Line 50)." Is the committee suggesting that the DGME Part B allocation would be reduced by 20 percent? This apparent reduction to the DGME payment is not explained in the report.

- Page E-2 – In 1(b), the weighted allowable additional direct GME FTE count can be obtained from WS E4 Line 22. It is not clear why the committee does not use the reported value but instead, recalculates the variable: WS 4, line 24 divided by line 23.

- Page E-2 – For the current allowable IME for operation costs, WS EA, Line 29 should be used, instead of Line 28. Line 28 is only for reporting section 422, and Line 29 is used to report all operating IME payments.

- Page E-2 – If the committee includes the section 422 IME add-on payment in calculating 3(a), section 422 additional FTE count (WS EA, Line 25) should be included is treated in calculating the total IME capped resident count in 3(c).

- Page E-3 – For what and where are the "derived variables pertaining to hospital categories" used?

- Page F-1 – The timeline to implement the committee's recommendations is inconsistent and confusing. According to the phased-in approach described in the first paragraph of Appendix F, a 50 percent reduction to IME operating payments would happen by the fifth year. Then, "By Year 5, the funding formulae would be changed from hospital-specific amounts to a national combined per resident amount (PRA)." This method is consistent with the IME PRA formula described in Appendix E, in that only half of the IME operating payment is included to calculate the IME PRA. If combined PRA would be available in Year 5, we should see an increase to the GME payment of children's hospitals in Year 5 in Table F-1 (pg. F-2). However, Table F-1 shows that the GME payment for children's hospitals would increase from Year 1 and be constant from Year 1 to Year 5, which suggests children's hospitals would receive combined PRA from Year 1, before the PRA approach would be fully implemented.

- Pages F-2 and F-3 – The baseline IME and DGME payments in Table F-1 are different from those in Table F-2. In Table F-1, the IME payment in the baseline (2012) is $6.8 billion, and the DGME payment is $2.8 billion. However, in Table F-2, the IME payment for IPPS hospitals only in the baseline (IOM analysis of the 12/31/2013 CMS HCRIS data) is $6.996 billion, and the DGME payment is $2.91 billion. If Table F-2 is based on 2011 HCRIS data and only includes IPPS hospitals, we would expect the numbers in Table F-2 to be lower, not higher, than those in Table F-1.

- Page F-5 – Some numbers in Table F-3 do not add up. For example, adding all "Consolidated PRA Payments" of hospitals with different "Number of residents," yields

$6,533 million in total; however, adding all "Consolidated PRA Payments" of hospitals with different "Medicare share quintile," yields $6,133 million in total. None of the totals match each other or the total of $6,633 million for all hospitals listed in the first row.

- Page F-5 – The numbers reported in Table F-3 do not seem to correspond with the calculations outlined in Appendix E (pg. E-3). For example, for hospitals with 500 or more residents, calculating the change in average payment per resident using the formula provided in Appendix E and numbers shown in table F-3, calls for subtracting the current DGME payment ($645 million) and current IME payment ($1,781 million) from the consolidated PRA payment ($1,556 million), then dividing by the total weighted GME count of 18,473. This calculation yields -$47,095, nearly $6,000 or 13 percent less than the -$41,733 listed in Table F-3.