

ALIGNING GME POLICY WITH THE NATION'S HEALTH CARE WORKFORCE NEEDS



Aligning GME Policy with the Nation's Health Care Workforce Needs Summary of Position Paper Approved by the ACP Board of Regents, October 2011

What is GME?

Graduate Medical Education (GME) is a formal clinical training provided by approved residency and fellowship programs to physicians who have received an MD or a DO degree (or a foreign equivalent). It involves a period of training lasting at least three to seven years in which physicians are directly supervised in their learning as they progressively assume more responsibility for patient care.

Why is Public Financing of GME Important?

GME is a public good—it benefits all of society, not just those who directly purchase or receive it. The federal government recognizes the importance of supporting medical education and is the single largest explicit contributor to GME. Funding is primarily provided through the Medicare program, which subsidizes education and training for over 90,000 residents in more than 1,100 hospitals. Other forms of government support come through state Medicaid programs, the Department of Defense or the Department of Veterans Affairs. In addition to government funding, private payers, philanthropy, and institutional resources may provide support.

With the federal deficit at an all-time high and an increased commitment to fiscal responsibility, entitlement programs, such as Medicare, face greater scrutiny. There has been an increased interest in transparency and accountability for the nearly \$10 billion that the federal government spends on GME annually. At the same time, the nation is facing a physician workforce crisis, particularly in the supply of internal medicine specialists and other primary care physicians. Medicare currently places different limits on the number of Medicare-funded GME positions available. Unless these caps are lifted, existing dollars, and any additional funding that may be appropriated, must be used efficiently to align spending with workforce policy goals and ensure that taxpayers are getting optimal value from their investment in GME.

Key Findings and Recommendations from the Paper

- There is a shortage of primary care physicians in the United States, particularly the supply of internal medicine specialists, who are at the forefront of managing chronic diseases and providing comprehensive and coordinated long-term care.
- Better models of ambulatory training and exposure to team-based approaches to patient care are essential to recruiting top-quality internal medicine specialists and other primary care physicians.
- The nation will not be able to expand access, improve health outcomes, and decrease health care expenditures without a national health care workforce policy and adequate funding to achieve these goals.

ACP recommends the following:

- Payment of Medicare GME funds to hospitals and training programs should be tied to the nation's health care workforce needs and place a priority on primary care in order to create a well-functioning health care system.
- Funding should be available to train internal medicine residents in health centers and community-based training programs, so that they have more experience with the broad range of patients typically seen by primary care physicians.
- Medical educators, not government, should take the lead in improving GME curricula to
 provide the best possible clinical care; and pilot projects and greater flexibility should be
 introduced to help drive innovation and help ensure that future physicians have the skills
 necessary to coordinate care across settings.
- GME financing should be transparent, and all payers should be required to contribute to a financing pool to support residencies that meet policy goals so that the costs of GME financing are spread across the health care system.
- Robust and stable funding for Title VII of the Public Health Service Act, designed to
 encourage health care workers to practice in areas of the United States with limited
 access to care, and the National Health Service Corps, which connects primary health
 care providers with underserved areas, is needed to attract and maintain top-quality
 health professionals in primary care fields.

For More Information

This issue brief is a summary of *Aligning GME Policy with the Nation's Health Care Workforce Needs*. The full paper is available at

http://www.acponline.org/advocacy/where_we_stand/policy/gme_policy.pdf.

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A Position Paper of the American College of Physicians

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With the federal deficit at an all-time high and an increased commitment to fiscal responsibility, entitlement programs, such as Medicare, face greater scrutiny. There has been an increased interest in transparency and accountability for the nearly \$10 billion dollars that the federal government spends on graduate medical education (GME) annually. In addition, with the major reforms coming from the Patient Protection and Affordable Care Act (ACA), ensuring an adequate health care workforce with the skills to care for the needs of society is more important than ever. Unless the caps on the number of Medicare-funded GME positions are lifted, existing dollars, and any additional funding that may be appropriated, must be used efficiently to align spending with workforce policy goals and ensure that taxpayers are getting optimal value from their investment in GME.

The American College of Physicians has long been concerned about the shortage of primary care physicians in the United States, particularly the supply of general internists, who are at the forefront of managing chronic diseases and providing comprehensive and coordinated long-term care. The skills of general internists will be increasingly necessary to take care of an aging population with a growing incidence of chronic disease. Systems dominated by primary care providers have better outcomes at lower costs. Yet the nation is facing a severe shortage of primary care physicians for adults, an estimated 44,000-46,000 by 2025. This figure does not take into account the increasing demand for primary care services as 32 million uninsured Americans obtain coverage through the reforms in the ACA.

Better models of ambulatory training and exposure to team-based approaches to patient care, particularly in the ambulatory setting, are essential to making careers in general internal medicine and other primary care specialties more attractive and relevant. While implementing such changes will require collaboration among all the stakeholders in primary care training, it will also require changes to GME financing and the support of those who pay for health care. Beyond the College's concern for primary care, ACP feels strongly that the GME system should ensure that the nation has an adequate supply of the types of physicians needed to treat patients, that they enter the workforce with the knowledge and skills required to provide the highest quality care, and that all Americans have access to such care. The nation will not be able to expand access, improve health outcomes, and decrease health care expenditures without a national health care workforce policy and the appropriate direction of funding to achieve these goals.

ACP recommends the following:

- 1. Payment of Medicare GME funds to hospitals and training programs should be tied to the nation's health care workforce needs. Payments should be used to meet policy goals to ensure an adequate supply, specialty mix, and site of training.
- 2. There should be a substantially greater differential in the weighted formula for determining direct GME payments for residents in primary care fields, including internal medicine. Training programs should receive enough funding to develop the most robust training programs and meet the requirements stipulated by their Residency Review Committees (RRCs).

- 3. GME caps should be lifted as needed to permit training of an adequate number of primary care physicians, including general internists, and other specialties facing shortages. Opportunities for GME should exist for both international medical graduates and U.S. medical graduates.
- 4. Internal medicine residents should receive exposure to primary care in well-functioning ambulatory settings that are financially supported for their training roles. The Accreditation Council for Graduate Medical Education (ACGME) and RRCs should establish specific goals for increased time spent by residents in ambulatory settings. Mentorship programs should be encouraged. Additional Medicare funding should be provided to facilitate training in all ambulatory settings that provide residency education.
- 5. Medical educators, not governments, should take the lead in improving GME curricula, but governments should provide competitive funding and support to encourage and facilitate such innovation.
- 6. The concept of a performance based GME payment system is an idea that is worth exploring. Such a system should be thoughtfully developed and considered in a deliberate way to ensure that goals are achieved without destabilizing the system of physician training. ACP recommends the following:
 - Measures should be developed by appropriate stakeholders, including physicians involved in GME, especially those involved in primary care training.
 - All measures must be carefully developed and thoroughly evaluated before they are implemented.
 - Any curriculum related measures should be linked to the well established ACGME competencies and competency based educational reforms already underway.
 - Training programs must be allowed adequate time to make necessary changes to their programs before financial incentives are introduced so that they do not risk losing funding at a time when they may need additional resources to meet performance standards.
 - Measures must be developed and implemented in a manner that does not systematically advantage or disadvantage certain types of hospitals and training programs, for example large programs, rural programs, community based programs.
 - A provision must be in place to evaluate the operation of any performance based GME payment system at certain intervals to avoid adverse unintended consequences, ensure that the goals of implementing such a system are achieved, and that the measures are still relevant over time. It should not be assumed that simply instituting performance metrics will result in improved medical education and/or progress toward workforce goals.

- 7. The ACGME and RRCs should provide greater flexibility to training programs to experiment with innovative methods and techniques to improve their training programs and provide residents with the skills and experiences necessary to meet the nation's health care needs.
- 8. Pilot projects should be introduced to promote innovation in GME and provide training programs with the resources necessary to experiment with innovative training models and incorporate models of care, such as the patient-centered medical home. Congress should consider creating a Center for Medical Education Innovation and Research, parallel to the Center for Medicare and Medicaid Innovation, with dedicated dollars to fund pilots and multisite educational outcomes research and have them more widely accepted if successful.
- GME financing should be transparent, and accountability is needed to ensure that funds are appropriately designated toward activities related to the educational mission of teaching and training residents.
- 10. All payers should be required to contribute to a financing pool to support residencies that meet policy goals related to supply, specialty mix, and site of training.
- 11. Incentives are needed to attract medical students, especially U.S. medical graduates, to residencies in primary care fields, including internal medicine.
- 12. A significant commitment to robust and stable Title VII health professions funding is needed.

Background

Graduate Medical Education in the United States

Graduate medical education (GME) is formal clinical training provided by approved residency and fellowship programs to physicians who have received an MD or DO degree (or a foreign equivalent). It involves a period of training lasting at least three to seven years in which physicians are directly supervised in their learning as they progressively assume more responsibility for patient care. In the United States, training programs must be accredited by the Accreditation Council for Graduate Medical Education (ACGME) or approved by the Commission on Osteopathic College Accreditation (COCA). Teaching hospitals generally serve as the sponsors and main training sites for most residency programs, although training can occur in other inpatient and ambulatory settings in a variety of community-based settings.

In academic year 2009-2010, 111,386 residents were enrolled in ACGME-accredited residency programs. Six hundred and eight-one institutions sponsored residency programs during 2009–2010, and of the sponsoring institutions, 377 were considered multisite sponsors that sponsored programs in more than one specialty and affiliated subspecialties. Internal medicine had 24.5% of residents enrolled in its residency programs, with 10.4% family medicine programs and 8.9% in pediatrics programs. Forty-five percent of the internal medicine residents in training in 2009-2010 were international medical graduates (IMGs). (5)

Teaching hospitals, and therefore residents, are unevenly distributed across the United States. Most states have fewer than 30 residents for every 100,000 people, while five have more than 50 residents per 100,000 people and four have 10 or fewer.⁽⁶⁾

Overview of GME Financing System

GME financing is provided primarily to teaching hospitals from government payers and insurers as part of their support for patient care services. The primary federal sources of funding for the costs of GME are Medicare, Medicaid, the Department of Veterans Affairs, the Health Resources and Services Administration's (HRSA) Title VII health professions programs, the Children's Hospital GME Program, and the Department of Defense. Other sources of funding include private payers (although this is rarely explicit), philanthropy, and institutional resources.

Medicare

The largest single explicit financing source for GME is Medicare. Medicare subsidizes education and training for over 90,000 residents in more than 1,100 hospitals. In 2009, Medicare expenses associated with GME were approximately \$9.5 billion. Such funding is provided to teaching hospitals with no restrictions on which physicians are trained.

The costs of GME are recognized by Medicare under two mechanisms: direct graduate medical education payments (DGME) to hospitals for residents' stipends, faculty salaries, administrative costs, and institutional overhead; and an indirect medical education (IME) adjustment developed to compensate teaching hospitals for the higher costs associated with teaching, the involvement of residents in patient care, and the severity of illness of patients who require the specialized services that are available in teaching hospitals.

DGME payments are based on a hospital-specific, per-resident amount (PRA). The PRA is calculated by taking the DGME costs incurred by a teaching hospital in a base period (1984 or 1985) and dividing it by the number of full-time equivalent (FTE) residents during that base year. The PRA is updated annually for inflation. Payments for primary care residents are slightly higher because in 1994 and 1995 payments for those positions were updated for inflation, while those for other positions were not. In addition, the DGME amount for training beyond a resident's initial board certification in his/her first specialty is reduced by 50%. Medicare capped the number of residents it supports to the number in a hospital's most recent cost report period ending on or before December 31, 1996, as a result of changes made in the Balanced Budget Act of 1997.

IME payments are tied to a hospital's Medicare inpatient volume and case mix along with their training program size (subject to their resident cap number). The payments, based on a formula, are an adjustment to Medicare's inpatient payment rates and vary based on each hospital's ratio of residents to beds. The current IME rate is 5.5%. Based on this, the IME adjustment would result in an increase in a teaching hospital's Medicare reimbursement by 5.5% for every increment of 0.1 in the resident-to-bed ratio (1 resident to 10 beds). Medicare's IME payments were double the Medicare DGME payments in 2009.

Medicaid and Other Federal Sources

States can support GME through their Medicaid programs, although there is a great deal of variability in the amounts and mechanisms of support. Medicaid's contribution to GME expenses is considerable, with an estimated \$3.2 billion in support from federal and state funds in 2005. Medicaid GME funding has recently become extremely vulnerable due to financial constraints in state budgets.

In addition, the Department of Veterans Affairs (VA) funds over 9,000 resident FTE positions. The Department of Defense supports the education and training of about 3,000 residents. The Children's Hospital Medical Education Program administered by the Health Resources and Services Administration (HRSA) provides \$300 million to support direct and indirect GME costs. The newly established teaching health centers program will also support direct and indirect costs of GME through HRSA. Some Title VII grants administered by HRSA are used to support residency programs in primary care and geriatrics, although funds for these programs are modest.

GME Oversight

The Accreditation Council for Graduate Medical Education (ACGME) is a private, nonprofit council established in 1981 that evaluates and accredits medical residency programs in the United States and internationally. The accreditation process ensures that the training residents receive and the care residents provide to patients is of the highest quality. To obtain accreditation, each training program must demonstrate their ability to train residents in the general competencies that are prerequisites for all programs regardless of specialty. The six general competencies are patient care, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, and systems-based practice. Training programs must also meet program requirements that provide standards concerning curriculum content, required resources and personnel, duration of training, and other requirements specific to each specialty. Each specialty has a Residency Review Committee (RRC) that evaluates all programs on a regular basis to determine if they meet the established requirements. Most fully accredited programs are reviewed every five years, but some outcomes metrics are evaluated by the RRC on an annual basis.

Summary and Analysis of Recent Proposals to Alter GME Financing

Below are summaries of recent proposals to alter GME financing and the College's analysis of the ability of these proposals to align GME with the nation's health care workforce needs.

MedPAC

The Medicare Payment Advisory Commission (MedPAC) has consistently found that the IME payments teaching hospitals receive are higher than the actual cost of treating Medicare patients. Most recently, MedPAC studied Medicare inpatient costs per case and found that costs increased about 2.2% for every 10% increase in the ratio of residents to hospital beds, less than half the current IME adjustment of 5.5%.

In its June 2010 report, MedPAC made five recommendations to Congress on GME. Most notably, it recommended that Congress authorize the Secretary of Health and Human Services (HHS) to establish a performance-based incentive program for Medicare GME payments by distributing approximately \$3.5 billion in indirect medical education (IME) payments above the 2.2% MedPAC estimates is the extra cost for teaching hospitals. The Commission had been examining ways to improve GME through Medicare's teaching payments with the goal of creating a payment system that fosters greater accountability for Medicare's GME dollars and rewards education and training that will improve the health care delivery system.

The distribution of IME funds above actual cost would be dependent on institutions meeting desired educational outcomes and standards. The Commission called on the Secretary of HHS to establish standards for distributing these funds after consultation with various groups, including accrediting organizations, training programs, and health care organizations, as well as patients and purchasers. Standards would mirror ACGME's general competencies—practice-based learning and improvement, interpersonal and communication skills, professionalism and systems-based practice, and the integration of community-based care with hospital care.

MedPAC's other recommendations would have the Secretary of HHS annually publish a publicly accessible report that shows the direct GME and IME payments received by each hospital, the number of residents trained, and Medicare's share of the associated costs incurred by the hospital to increase transparency; conduct workforce analyses to determine the number of residency positions needed in the U.S; report to Congress how residency programs affect the financial performance of sponsoring institutions and whether all residency programs should be supported at the same level by the Medicare program; and study and report strategies for increasing the diversity of the health professional workforce.⁽⁸⁾

Analysis: The concept of a performance based GME payment system is an idea that is worth exploring. Such a system should be thoughtfully developed and considered in a deliberate way to ensure that goals are achieved without destabilizing the system of physician training. Members of the academic medicine community are best equipped, by virtue of their medical training and experience as educators, to develop and monitor educational standards. Physicians involved in primary care training should be among the stakeholders consulted in establishing such a system. A provision must be in place to evaluate the performance based GME payment system at certain intervals to avoid adverse unintended consequences, ensure that the goals of implementing such a system are achieved, and that the measures are still relevant over time.

National Commission on Fiscal Responsibility and Reform

In its December 2010 report, the National Commission on Fiscal Responsibility and Reform, a bipartisan commission created by President Barack Obama to address the nation's fiscal challenges, made a series of recommendations to balance the nation's budget by 2015. One of the recommendations was to reduce "excess" payments to hospitals for medical education. The Commission proposed that this be done by limiting hospitals' DGME payments to 120% of the national average salary paid to residents in 2010 and annually updating for inflation as well as by reducing the IME adjustment from 5.5% to 2.2%, citing MedPAC's estimate that a 2.2% adjustment would more accurately reflect teaching hospitals' additional costs of treating Medicare patients.⁽⁹⁾

Analysis: Reducing the IME adjustment by more than half would destabilize the ability of the United States to train physicians with the right numbers, mix, and distribution of specialties and practice location and skills needed to meet the growing demand for health care. The identification of "excess" payments in Medicare IME payments fails to recognize fully the additional—but difficult to measure—costs associated with teaching hospitals, which IME payments were created to reimburse. In addition, such cuts would only aggravate the crisis in the supply of primary care physicians and other specialties facing shortages as teaching hospitals may be forced to reduce the size of their training programs.

CoGME

The Council on Graduate Medical Education (CoGME) released its 20th report, Advancing Primary Care, in January 2011. The Council recommended that policies be implemented to raise the percentage of primary care physicians to at least 40% from the current level of 32%. The Council noted the need for a significant increase in current primary care production and major changes in resident training to ensure preparedness for the practice environment of the future. CoGME calls on Congress, the Administration, Department of Health and Human Services, accrediting agencies, and private insurers to

- 1. Change regulations to support more training in outpatient settings and experimentation with practice models to prepare residents appropriately for an evolving contemporary health care environment.
- 2. Strategically increase the number of new primary care GME positions and programs to accommodate the increased production of medical school graduates and respond to the need for a workforce comprising at least 40% primary care physicians.
- 3. Increase training in ambulatory, community, and medically underserved sites by:
 - Promoting educational collaboration between academic programs and Federally Qualified Health Centers (FQHCs), rural health clinics (RHCs), and the National Health Service Corps (NHSC); and
 - Implementing new methods of funding to include reallocation of existing GME funding, new GME funding that is not calculated according to Medicare beneficiary bed-days, and substantial expansion of Title VII funding specifically for community-based training.

4. Provide financial incentives for GME that:

- Directly provide GME funding to primary care residency programs, educational consortia, or non-hospital community agencies to provide the proper incentives for ambulatory and community-based training;
- Explore augmenting payments for primary care residents, including differentially higher salaries and early loan repayments, to decrease the negative impact of educational debt on primary care specialty choice;
- Fund all primary care residency programs at least at the 95th percentile level of funding for all programs nationally (using total direct medical education [DME] and indirect medical education [IME] payments as a basis); and
- Financially reward teaching hospitals, training programs, and community agencies on the basis of the number of primary care physicians produced, to be determined by specialty in practice and not at the initiation of training.

Analysis: The College supports CoGME's recommendation to implement policies to increase the percentage of primary care physicians to at least 40%. The College agrees that changes in regulations will be needed to support increased training in outpatient settings and experiment with new practice models. Increasing funding to primary care residency programs to at least the 95th percentile level of all programs will likely be inadequate to make the changes necessary to improve the experiences in training programs and encourage teaching hospitals to establish or expand primary care training programs.

Lift GME Caps

In 2008, the Association of American Medical Colleges (AAMC) recommended a 30% increase in medical school class size from the 2002 level over the next decade. The Association also recommended that the aggregate number of GME positions should be expanded to accommodate the additional medical school graduates. The AAMC, along with the American Medical Association, has advocated for lifting the current cap on Medicare-funded GME positions.

Analysis: Lifting the cap on the number of Medicare-funded GME positions will be costly and will not ensure an adequate supply with the specialty mix and distribution of physicians that the nation needs. A better approach would be to adjust the caps based on an assessment of national workforce needs and goals, so that programs that train specialties for which there is the greatest need, including internal medicine and family medicine programs, would get priority for increased residency positions.

Competition and Innovation Through a Peer-Review Process

Dr. David Goodman, the Director of the Dartmouth Institute for Health Policy and Clinical Practice and a leading workforce expert, recommends that competition and innovation be introduced in GME. He points to the NIH's competitive peer-review process as an example of a successful national program. Goodman believes that GME funding requests could be scored for such factors as training in evidence-based medicine, shared patient decision-making, chronic illness management, and training based in an efficient delivery

system or an underserved area. He also suggests that money could be prospectively allocated to primary care or other high-priority specialties. (11)

Analysis: While the academic medicine community remains best equipped to develop and monitor educational standards, the federal government could use its funding power to get the academic medical community to innovate on their own. Scoring for other factors, such as training in an underserved area or training more primary care physicians or other specialties facing shortages, would help to address the supply, mix, and geographic distribution of physicians.

GME Allocation System

Dr. Fitzhugh Mullan, Murdock Head Professor of Medicine and Health Policy at George Washington University, recommends that teaching hospitals be required to consider community or regional workforce needs and make application for training positions based on a fiduciary duty to train the complement of residents based on an analysis of regional needs. (12) Another option Mullan recommends is the establishment of state-based GME organizations that would work with the Center for Medicare & Medicaid Services (CMS) on residency training targets and GME funding.

Analysis: The College is supportive of a GME allocation system based on the nation's health care workforce needs. Funding should be weighted to encourage establishment or expansion of training programs in the specialties and the areas of the nation with the greatest need.

GME Vouchers

In a 2008 policy statement, the American Academy of Pediatrics proposed a portable authorization system that would allocate GME funds for DGME costs to accredited residency programs based on the selection of a program by a qualified resident. The total number of positions to be funded would be set by a workforce policy body based on national workforce requirements. (13)

Analysis: GME vouchers distributed based on an assessment of national physician workforce needs would help to ensure an appropriate supply and specialty mix of physicians. They would also provide greater flexibility in the site of training, because payment would not be tied to a teaching hospital. However, these vouchers would only cover DGME costs, not IME, which accounts for two-thirds of total GME funding and would continue to go directly to the teaching hospital under this option. This may result in insufficient funding for community based training programs where at least half of the GME is currently taking place.

Special Funding for Primary Care Training Programs

The Council of Academic Family Medicine (CAFM) is advocating a proposal involving the establishment of a special fund for primary care training programs that goes directly to the residency programs separate from GME funding. It proposes to increase payments for primary care training and give GME payments for primary care residencies to the entity in charge of the education rather than the hospital. The Council's proposal also includes a recommendation to reward hospitals on the basis of the number of primary care physicians produced, and provide incentives for training in underserved areas as well as incentives to medical students who choose careers in primary care. (14)

Analysis: Increased payments for primary care training programs and incentives to hospitals for training more primary care physicians and training in underserved areas are necessary to ensure an adequate supply of primary care physicians. Any changes in funding should also consider the impact on other specialties facing shortages.

All-Payer GME System

Since 1997, the College has supported the concept of an all-payer GME system. (15) Many other medical associations also support this model. (13, 16) CoGME has repeatedly made recommendations to adopt an all-payer GME system. (17, 18) Most proposals for the establishment of an all-payer system would create a GME trust fund in which Medicare and Medicaid would continue to contribute to GME, but private payers would do so as well through a modest assessment on health insurance premiums.

Analysis: Such a funding system would be more equitable and provide stability to the GME funding stream. An all-payer system could also be an important contribution to deficit reduction by spreading the responsibility for funding of GME to all whom benefit from it instead of the federal government bearing a disproportionate share of the cost as it does today. The all-payer system should be linked to the nation's health care workforce needs so ensure an adequate supply of physicians with an appropriate specialty mix and distribution.

Innovative Models of Training

As the health care delivery system evolves, how—and often where—residents are trained will need to evolve as well. Experimentation and adoption of innovative models of training are necessary to prepare future physicians with the skills necessary to practice in patient-centered medical homes, ACOs, and other contemporary models of health care. Such training will require changes to GME funding, accreditation, and the culture of academic medicine. While the models highlighted below may not work for every primary care training program across the country, much can be learned from them.

Teaching Health Centers

Teaching health centers (THCs) are community-based, ambulatory patient care centers that operate a primary care residency program. They can include federally qualified health centers, community mental health centers, rural health clinics, and health centers operated by the Indian Health Service. Training programs at THCs would receive GME funding directly, rather than through a teaching hospital. The goals of THCs are to increase residency training in community-based ambulatory settings and to strengthen community health centers. Supporters of THCs claim that placing residency programs in health centers would have an immediate impact on the current workforce as the residents would provide much-needed services at these centers, and that graduates from training programs at THCs would be more likely to continue practicing in health centers and in primary care specialties. In addition, teaching increases buy-in and retention for health center physicians, and THC graduates are much more likely to continue practicing in health centers and in primary care.

The ACA established a Title VII grant program for THCs in 2010 for new or expanded existing accredited primary care residency programs. The law authorizes \$25 million for FY2010, \$50 million in FYs 2011 and 2012, and such

sums as may be necessary in subsequent years. Beginning in 2011, teaching health centers also will be eligible for Medicare direct medical education and indirect medical education funds.

Residency programs that qualify are family medicine, internal medicine, pediatrics, internal medicine-pediatrics, obstetrics and gynecology, psychiatry, general and pediatric dentistry, and geriatrics. Each THC may apply for awards up to \$500,000 a year for up to 3 years. Funds must be spent to cover the costs of establishing or expanding a primary care residency program, including expenses related to curriculum development, recruitment, training, retention of residents and faculty, accreditation, and faculty salaries during the development phase. Funds can also be used to cover technical assistance provided by entities, including area health education centers (AHECs).

CHAMP

In a January 2010 Annals article, Rieselbach and colleagues proposed the establishment of Community Health and Academic Medical Partnerships (CHAMP), a variation of the teaching health centers program, which would establish primary care resident ambulatory training programs in community health centers that meet tier-2 requirements for a patient-centered medical home. Primary care residents would be sent there for their final year of training followed by the incentive to continue to practice in an underserved area by providing National Health Service Corps loan repayment. First- and second-year residents would also be assigned to the teaching health centers for their continuity clinics. The authors argue that one of the many benefits of CHAMP is that residents being trained in CHCs would immediately increase the clinical capacity of these facilities, which will be under severe pressure to meet the needs of the newly insured, and ultimately expand the primary care workforce.

To qualify, teaching health centers would be required to:

- Be located in a community health center in a primary care health professional shortage area as designated by the Health Resources and Services Administration;
- Be affiliated with a residency program in family medicine, internal medicine, or pediatrics and capable of using this setting for primary care resident ambulatory training;
- Be part of an established community health center with the capability to expand and staff the center, as well as be part of a community governance board committed to supporting both the educational and service missions;
- Have implemented or intend to implement National Committee for Quality Assurance tier-2 requirements for a patient-centered medical home.

Expanding primary care residency positions in CHCs under CHAMP would likely require that teaching hospitals explicitly direct some of their DGME payments to CHC training sites and that the overall cap on Medicare-funded residency positions be raised to allow for additional primary care slots. In addition, because this model would deviate from current training guidelines, it would be necessary for sponsoring institutions to obtain waivers from the family medicine, internal medicine, and pediatrics Residency Review Committees.

TEACH Program

Another model with the potential to improve care for the underserved and bolster the primary care workforce is the Transforming Education and Community Health Program (TEACH). In 2005 the University of California, Davis (UC Davis) Internal Medicine residency program partnered with the Sacramento County Department of Health and Human Services to develop a teaching health center in the county's largest community health center. TEACH places residents into primary care and medically underserved communities and increase access to care for the medically underserved, while also training them to provide well-coordinated, evidence-based, culturally competent care. The program is supported by a Title VII Health Resources and Services Administration Residency Training in Primary Care grant.

Each year, five internal medicine residents are selected to spend their final year of residency in the TEACH Program, caring for a cohort of uninsured patients in a Sacramento County clinic and on a dedicated inpatient service at the UC Davis Medical Center. TEACH residents spend three afternoons per week in continuity clinic at the main community health center and rotate through other university specialty and subspecialty clinics as well as county-based clinics. This schedule allows the residents to care for their patients during acute illness, recovery, and follow-up care. The inpatient team includes 1 TEACH resident, 1 third-year medical student, and a supervising TEACH faculty. (19, 20)

ACGME's Educational Innovations Project

In 2005, the Internal Medicine Residency Review Committee of the ACGME developed the Educational Innovations Project (EIP) to support new models of Internal Medicine training. (21) EIP accreditation emphasizes improving educational and patient care outcomes rather than focusing on process measures. Selected internal medicine programs are given enhanced flexibility in meeting their accreditation requirements. This allows them to focus on competency-based education with an emphasis on quality and safety. Participating EIP programs have developed innovative methods to assess resident practice in ambulatory settings, promote multidisciplinary teamwork, develop competencies in systems based practice, and engage residents in reviewing and reducing medical errors.

The Internal Medicine program at the University of Cincinnati is one of the programs that participates in the EIP. They created a year-long continuous ambulatory group-practice experience called "The Long Block." The Long-Block is separated from traditional inpatient responsibilities and begins in the 17th month of residency for a total of 12 consecutive months. The practice adopted the Chronic Care Model and residents are provided extensive instruction in quality improvement and interprofessional teams. The Long Block was associated with significant increases in both resident and patient satisfaction. In addition, improvement was seen in a number of quality process and outcome measures as well as continuity and no-show rates for patients. (22)

Beth Israel Deaconess Medical Center's internal medicine residency program also participates in EIP. The program reconfigured its inpatient medical service to function around geographically based units, or microsystems, of care, in which residents, nurses, and staff function in integrated teams. The program also has an active curriculum in quality improvement based in those microsystems, and trained and funded a QI faculty. After 18 months residents reported greater satisfaction with the quality of care they delivered and more residents reported having roles in designing and implementing quality improvement changes.⁽²³⁾

Positions

1. Payment of Medicare GME funds to hospitals and training programs should be tied to the nation's health care workforce needs. Payments should be used to meet policy goals to ensure an adequate supply, specialty mix and site of training.

Currently, the types of residents trained in teaching hospitals are determined by the staffing needs of the particular hospital and the number of funded positions set by the cap in 1996. Medicare GME funds are supposed to help develop the future physician workforce, yet teaching hospitals are not required to consider local, regional, or national workforce needs, perhaps because the nation lacks a national health care workforce policy. The College feels strongly that Medicare GME funds should be tied to the nation's health care workforce needs. The College is encouraged by the establishment of the National Health Care Workforce Commission, charged with evaluating the nation's health care workforce needs and providing recommendations to Congress and the Administration on national health workforce priorities, goals, and policies. These policies should include sufficient support to educate and train a supply of health professionals that meets the nation's health care needs and specifically to ensure an adequate supply and spectrum of primary care physicians trained to manage care for the whole patient.

Several studies have already projected a shortage of physicians, with the demand for primary care physicians outpacing supply faster than for any other specialty group. The AAMC estimates that there will be a shortage of 124,000 physicians by 2025, which will include 46,000 FTE primary care physicians, 37% of the total. (24) These findings are consistent with recently published projections by researchers from the University of Missouri and the Health Resources Services Administration. The study also predicted that population growth and aging will increase family physicians' and general internists' workloads by 29% between 2005 and 2025.(4) Since its initial analysis, AAMC estimated that universal health care coverage will add to overall demand for doctors and increase the projected shortfall by an additional 25%. (25) The Patient Protection and Affordable Care Act (ACA; PL 111-148) will provide coverage to about 32 million Americans. This will have a significant impact on the health care workforce, particularly primary care physicians, who the newly insured will seek out to coordinate and manage their care.

There is also significant evidence of geographic maldistribution of physicians. (26, 27) Metropolitan areas have a ratio of 93 primary care physicians per 100,000 people while nonmetropolitan areas have a ratio of 55 primary care physicians per 100,000 people. (28) Specialists are even more concentrated, with more than three times the density of specialists in metropolitan areas than in nonmetropolitan areas. Physician maldistribution results in gaps in access to care, and in health disparities suffered by specific regions, races, and income groups. (29) According to the Health Resources and Services Administration (HRSA), there are 6,204 Primary Care Health Professions Shortage Areas (HPSAs) with 65 million people living in them. An estimated 16,643 practitioners are required to meet their need for primary care (a population to practitioner ratio of 2,000:1).(30) Physicians tend to stay to work in the area where they were trained, so Medicare GME dollars should be weighted to favor training programs in rural and underserved areas. Students from rural areas are more likely to practice in rural areas than those from urban areas. (31) Weighting or shifting GME dollars to programs in areas of the country where physicians are needed most might lead to an increase in training positions in

underserved areas, and a change in the distribution of physicians once their training is completed.

A thorough assessment of the supply, specialty mix, and distribution of physicians is necessary, and Medicare GME dollars should be used to address any shortcomings. This assessment should be a top priority for the National Health care Workforce Commission and the National Center for Health Workforce Analysis. While it is imperative that the number and proportion of primary care physicians be increased, the aging of the population will demand a sufficient number of physicians trained in the complex medical problems typical of that age group, including oncology, rheumatology, cardiology, nephrology, geriatrics, pulmonary and critical care, and other internal medicine subspecialties. In addition, other specialties are facing shortages, including general surgery. (32)

2. There should be a substantially greater differential in the weighted formula for determining DGME payments for residents in primary care fields, including internal medicine. Training programs should receive enough funding to develop the most robust training programs and meet the requirements stipulated by their Residency Review Committees (RRCs).

Medicare DGME funding policies give primary care residency positions a slightly higher per-resident amount, but this has had little effect on residency training. A substantially higher payment would allow training programs to better meet the requirements stipulated by their RRCs. It would also provide them the flexibility to increase and improve ambulatory experiences and expand innovations, and may lead to increased interest in the field by residents. In addition, this change would help to achieve CoGME's recommendation to produce a physician workforce that is at least 40% primary care.

Data suggest that teaching hospitals have favored higher revenue-generating specialty training over primary care positions by expanding positions in the "R.O.A.D." disciplines (radiology, ophthalmology, anesthesia, and dermatology) and emergency medicine. The expansion of these programs over the past ten years parallels losses in positions in primary care specialties. (33) Primary care training programs should receive enough funding to develop the most robust training programs and meet RRC mandates.

In addition, programs should be allowed to invest in better ambulatory experiences for trainees without being tied to fulfilling the patient care needs of the hospital. As programs adopt more innovative training models and increase exposure to well-functioning ambulatory settings, sufficient funding will be necessary to invest in training and development of primary care faculty.

3. GME caps should be lifted as needed to permit training of an adequate number of primary care physicians, including general internists, and other specialties facing shortages. Opportunities for graduate medical education should exist for both international medical graduates and U.S. medical graduates.

While changing the way existing GME dollars are distributed is important, Medicare GME-funding limits on residency training positions will continue to impede the establishment of new residency programs and additional training positions in existing programs. Medical schools have done their part to expand class sizes, but this will not increase the total number of U.S. physicians unless

GME capacity is increased as well. In response to the estimated shortage of physicians, the AAMC has advocated for a 30% increase in medical school class size and a corresponding increase in the current number of GME positions.⁽³⁴⁾

ACP has considered the option of increasing the number of overall GME positions to increase the supply of physicians, but concluded that increasing the overall pool of physicians would not ensure that adequate numbers enter and remain in practice in primary care, including general internal medicine, and in other specialties facing shortages. Also, the imperative of deficit reduction suggests that federal government funding for GME could be more effectively targeted and prioritized to fields with the greatest and most critical needs to train more physicians to meet national workforce goals, rather than asking the federal government to incur the much larger costs associated with an across-theboard expansion of residency positions. ACP recommends a targeted approach, recognizing the nation's increasing demographic demands for health care and the dwindling supply of primary care physicians. ACP recommends a strategic increasing in the number of Medicare-funded GME positions in primary care specialties that care for adults. With an estimated shortage of 44,000–46,000 primary care physicians anticipated by 2025, the federal government must act now to eliminate such a shortage. As a preliminary target, ACP recommends that the number of Medicare-funded GME positions available each year in primary care specialties that care for adults be increased to graduate 3000 additional primary care physicians each year for the next 15 years to meet the nation's anticipated health care needs.

There should be a sufficient number of residency training positions to accommodate both international medical graduates (IMGs) and U.S. medical graduates (USMGs). Opportunities should exist for those IMGs who will return to their country of origin upon completion of training as well as for those who may choose to remain in the U.S. and practice in an underserved area. ACP recognizes the value and contributions of IMGs and supports the use of J-1 visa waivers to fill shortages in rural communities and underserved areas. IMGs contribute helpful and necessary diversity to the physician workforce and help to care for an increasingly diverse patient population.

The ACA included provisions for a modest redistribution of unused residency slots with a priority to primary care, but this redistribution will not be enough to help meet the future demand for primary care physicians. In order to reform the nation's health care delivery system to better manage chronic conditions and keep patients from requiring hospitalization, an adequate supply of primary care physicians who can function with specialists and other health professionals as part of a team to manage a patient's whole health will be critical. In addition, without an increase in residency positions, IMGs may be forced out of the U.S. health care system, as more USMGs will likely fill residency positions once filled by IMGs, leading to a less culturally diverse physician population and a reversal of gains made in reducing Health Professions Shortage Areas.

4. Internal medicine residents should receive exposure to primary care in well-functioning ambulatory settings that are financially supported for their training roles. The ACGME and RRCs should establish specific goals for increased time spent by residents in ambulatory settings, Mentorship programs should be encouraged. Additional Medicare funding should be provided to facilitate training in all ambulatory settings that provide residency education.

Internal medicine residents receive in-depth training in the diagnosis and treatment of conditions that affect all organ systems. They are also trained to solve puzzling diagnostic problems and to handle severe chronic illnesses and situations where several different illnesses may strike at the same time. Internal medicine residents are also trained in the essentials of primary care internal medicine, which incorporates an understanding of disease prevention, wellness, substance abuse, and mental health. Internists are especially focused on the care of adult and elderly patients with multiple complex chronic diseases. General internists provide long-term, comprehensive care in both the office and the hospital, managing both common and complex illnesses of adolescents, adults, and the elderly, and it is essential that residents receive training in both hospitals and a variety of well-functioning ambulatory settings, including physician offices, geriatrics clinics, area health education centers, and community health centers. Exposure to the mix of patients they will typically see in practice is also important.

The mix of patients typically seen by residents in internal medicine programs is heavily skewed toward patients who are older, sicker, and poorer than those in actual practice because most of their training is in hospital clinics. Residents would view careers in office-based general internal medicine more positively if they were exposed to a more representative mix of patients. Further, changes in health care delivery and the population's health make hospital-based training less relevant. By exposing residents to well-functioning ambulatory settings, specifically physician offices, residents will be able to gain the skills necessary to care for the kinds of patients encountered in a typical primary care office-based practice.

Currently the RRC-IM requirement for ambulatory education for all residents is set at 33% of overall residency time. By establishing specific goals for increasing the percentage of training time spent in ambulatory settings, internal medicine and other primary care residency programs can offer a more balanced and realistic experience. Physician offices, area health education centers, and community health centers should receive financial support for the training they provide. In addition, mentorship programs should be encouraged and strengthened to ensure that residents are matched with practicing primary care physicians who can show them the many positive aspects of careers in general internal medicine and other primary care specialties.

Community-based training programs are one option to ensure more training in nonhospital ambulatory settings for primary care residents. These programs should receive GME funding directly, rather than being routed through a teaching hospital. While the ACA has legislated funds for the establishment of Teaching Health Centers (THCs) to expand or establish new internal medicine and other primary care residency programs at community health centers, grants to establish THCs are limited in size and number, and funding to support resident training is limited. Also, this newly established program is administered and funded by HRSA rather than Medicare. Medicare GME funds should also be used for funding training programs in community-based sites, and such funding should go directly to the site rather than to a teaching hospital.

5. Medical educators, not governments, should take the lead in improving GME curricula, but governments should provide competitive funding and support to encourage and facilitate such innovation.

The College believes that the content and focus of curriculum must reside with medical educators, not the government. Accreditation standards for GME have already been established by the ACGME and the College continues to support the ACGME as the appropriate body for such regulation. The goal of residency training is to provide the best possible clinical education within the context of providing the best patient care. Planning for changes in curriculum in residency training must be coordinated among the many jurisdictions responsible for maintaining this balance, including directors of medical residencies, chairs of academic departments of medicine, hospital directors and chiefs of staffs, the ACGME, and the appropriate RRCs. The academic medicine community takes this responsibility seriously and fulfills this responsibility through the ACGME and its accreditation program. The standards set by ACGME should not be replaced by federal or state regulatory bodies.

Instead, the College calls on the medical education community to accelerate efforts to implement the standards set by ACGME. The College also supports greater transparency in reporting on outcomes based on the adoption of these standards. The College feels strongly that the profession should be responsible for developing goals for improving curricula, measures on the effectiveness of each teaching program in achieving such goals, with transparency to payers and the public. The federal government could support such efforts by providing competitive grant funding to encourage and facilitate innovation.

- 6. The concept of a performance based GME payment system is an idea that is worth exploring. Such a system should be thoughtfully developed and considered in a deliberate way to ensure that goals are achieved without destabilizing the system of physician training. ACP recommends the following:
 - Measures should be developed by appropriate stakeholders, including physicians involved in GME, especially those involved in primary care training.
 - All measures must be carefully developed and thoroughly evaluated before they are implemented.
 - Any curriculum related measures should be linked to the well established ACGME competencies and competency based educational reforms already underway.
 - Training programs must be allowed adequate time to make necessary changes to their programs before financial incentives are introduced so that they do not risk losing funding at a time when they may need additional resources to meet performance standards.
 - Measures must be developed and implemented in a manner that does not systematically advantage or disadvantage certain types of hospitals and training programs, for example large programs, rural programs, community based programs.
 - A provision must be in place to evaluate the operation of any performance based GME payment system at certain intervals to avoid adverse unintended consequences, ensure that the goals of implementing such a system are achieved, and that the measures are still relevant over time. It should not be assumed that simply instituting performance metrics will result in improved medical education and/or progress toward workforce goals.

In recent years, some have proposed using a portion of IME dollars to establish a performance-based GME payment system in an effort to encourage greater accountability for Medicare's GME dollars and reward education and training that will improve the health care delivery system and/or meet the nation's workforce goals. In its June 2010 report, MedPAC recommended that Congress authorize the Secretary of Health and Human Services to establish a performance-based incentive program for Medicare GME payments by distributing approximately \$3.5 billion in IME payments above the 2.2% MedPAC estimates is the extra cost for teaching hospitals. The distribution of IME funds above actual cost would be dependent on institutions meeting desired educational outcomes and standards which would mirror ACGME's general competencies—practice-based learning and improvement, interpersonal and communication skills, professionalism and systems-based practice, and the integration of community-based care with hospital care.

In November 2010, Senator Jack Reed (D-RI) introduced legislation to reform GME in several ways including making 10 percent of GME payments performance based. Proposed measures include primary care, a variety of settings and systems, the coordination of patient care across settings, the relevant cost and value of various diagnostic and treatment options, inter-professional and multidisciplinary care teams, methods for identifying system errors and implementing system solutions, and the use of health information technology.

The College believes that the concept of a performance based GME payment system is worth exploring, but cautions that such a system must be thoughtfully developed and evaluated with input from a variety of stakeholders including physicians involved in primary care training. It should not be assumed that simply instituting performance metrics will result in improved medical education and/or progress toward workforce goals. Any proposal to establish a performance based GME payment system should include the criteria listed above.

7. The ACGME and RRCs should provide greater flexibility to training programs to experiment with innovative methods and techniques to improve their training programs and provide residents with the skills and experiences necessary to meet the nation's health care needs.

As the health care delivery system evolves toward more patient-centered team-based care, it will be increasingly important for future physicians to be equipped with skills to practice in such settings in order to meet the nation's health care needs. For primary care training programs, adopting patient-centered, longitudinal approaches and increasing training time to ambulatory settings are necessary. While regulatory changes are needed to ensure that training programs receive adequate funding to design the most robust curricula, changes in the accreditation process will be necessary to allow for experimentation and innovation. This will be particularly important for newly established community-based training programs.

The ACGME has already experimented with enhanced flexibility with the programs that participated in its Education Innovations Project. The College encourages the ACGME and RRCs to move forward with providing such flexibility to other programs that demonstrate preparedness for innovation.

8. Pilot projects should be introduced to promote innovation in GME and provide training programs with the resources necessary to experiment with innovative training models and incorporate

models of care, such as the patient-centered medical home. Congress should consider creating a Center for Medical Education Innovation and Research, parallel to the Center for Medicare and Medicaid Innovation, with dedicated dollars to fund pilots and multi-site educational outcomes research and have them more widely accepted if successful.

The nation cannot reform the health care delivery system without ensuring that future physicians have the skills necessary to coordinate care across settings, improve quality, and use resources efficiently. Training needs to be changed to incorporate the coordinated care that patients want and need to improve the value of the health care delivery system. The College believes that there is not one single appropriate model for a training program and that programs should be encouraged to develop models that best fit the needs of the communities their programs serve. Training programs need the flexibility and funding to develop and adopt innovative models of training so that residents have the skills necessary to work in a variety of emerging delivery models include the patient-centered medical home and accountable care organizations, and such evolving models as community health centers and integrated delivery systems.

As highlighted in the background section of this paper, several training programs are currently experimenting with innovative training models, but efforts must be made to encourage broader participation and acceptance of new approaches and to study the educational and patient care outcomes. The establishment of a Center for Medical Education Innovation and Research, parallel to the Center for Medicare & Medicaid Innovation, with dedicated funding for pilot programs followed by wider dissemination if successful, would greatly enhance efforts to ensure that residents are trained with the necessary skills for the practice environment of the future.

9. GME financing should be transparent, and accountability is needed to ensure that funds are appropriately designated toward activities related to the educational mission of teaching and training residents.

Medicare GME funds go directly to teaching hospitals that sponsor training programs, even if the hospitals do not directly incur all of the training costs. Faculty who run training programs often do not know how they are supported, or whether they are receiving adequate support from Medicare. (36) There needs to be greater accountability in ensuring that training programs receive enough funding to develop the most robust training programs and meet the requirements set by their RRCs.

In addition, while hospitals are required to provide cost reports annually to CMS, obtaining information on specific direct and indirect payments is difficult. Medicare GME payment information should be made publically available to ensure that these funds are used for the education and training of residents. ACP supports MedPAC's call for an annually published report that clearly identifies each hospital, the direct and indirect medical education payments received, the number of residents and other health professionals that Medicare supports, and Medicare's share of teaching costs incurred. These reports should also include information on progress made in using Medicare GME dollars to meet the nation's workforce goals.

10. All payers should be required to contribute to a financing pool to support residencies that meet policy goals related to supply, specialty mix, and site of training.

ACP believes that the costs of financing GME should be spread across the health care system. While Medicare and other federal programs should continue to make a significant contribution to the financing of GME, an all-payer system would ease the obligation on Medicare and taxpayers and provide a more steady and predictable funding stream. The supply and distribution of physicians affects the availability, cost, and quality of care for all Americans. As such, the cost should be borne by all payers.

GME is a public good— it benefits all of society, not just those who directly purchase or receive it. All payers depend on well-trained medical graduates, medical research, and technical advances from teaching hospitals to meet the nation's demand for a high standard of care. ACP believes that all payers derive value from this system and should share the investment in education and research. (37) All payers should be concerned about preserving the nation's system of GME, that high standards of quality for patient care services are maintained, and that opportunities for entry into the medical profession are available to the best-qualified candidates. A mechanism should be established to require all payers to explicitly contribute to GME.

11. Incentives are needed to attract medical students, especially U.S. medical graduates, to residencies in primary care fields, including internal medicine.

Although the College has called for an increase in the number of internal medicine and other primary care residency positions, the reality is that a significant number of existing positions are not being filled by U.S. medical graduates. Incentives are needed to attract U.S. medical graduates to existing and additional primary care training positions. Currently, there is a gap of more than \$135,000 between the median annual subspecialist income and that of primary care physician. This amounts to a \$3.5 million difference in expected income over a lifetime. (38) The continued failure of payers to recognize the value of primary care and the differences in income potential between primary care and other specialties remain barriers to new physicians practicing in primary care. A recent study found that the physician income gap decreases odds of choosing careers in primary care by almost 50%. (39) A 2008 study had similar results, finding a strong direct correlation between higher overall salary and higher residency fill rates with US medical graduates. (40) Compensation for primary care specialties must be made competitive with other specialties if we want more trainees to enter primary care residencies.

Scholarship and loan repayment programs, such as the National Health Service Corps and primary care training programs, are important to encourage careers in primary care and also to help improve access to those in underserved areas. However, until physician reimbursement is addressed, their impact will be limited as a recruitment tool.

The NHSC scholarship and loan repayment programs provide payment toward tuition/fees or student loans in exchange for service in an underserved area. Participation in the NHSC for 4 years or more greatly increases the likelihood that a physician will continue to work in an underserved area after leaving the program. Over the years, the number of clinicians in those programs has grown from 180 to over 4,000. In 2000, the NHSC conducted a large study of NHSC clinicians who had completed their service obligation up to 15 years before and found that 52% of those clinicians continued to serve the underserved in their practice. The programs under NHSC have been proven to make an impact in meeting the health care needs of the underserved, and with

more appropriations, they can do more. The College was pleased that the ACA included a mandatory fund for NHSC along with additional appropriations using discretionary dollars. ACP supports targeting a large portion of these funds toward scholarships and loan repayment awards for primary care physicians. In addition, the College would like to see a commitment to consistently fund this program at levels that will have a meaningful impact in addressing the primary care physician workforce crisis.

12. A significant commitment to robust and stable Title VII health professions funding is needed.

The programs under Title VII of the Public Health Service Act have proven to positively affect primary care, rural placement, and minority opportunities. The Title VII Training in Primary Care Medicine and Dentistry grant program has been the most important federal intervention to help build and maintain the primary care medical and dental training infrastructure in this country. Since its origins, the federal government, through the Title VII health professions grant program, has invested over \$1.2 billion in training family physicians, general internists, geriatricians, pediatricians, physician's assistants, and general and pediatric dentists. These dollars have also supported training community and academic primary care clinicians as teachers and research fellows who have gone on to make major contributions to such fields as health disparities, quality improvement and patient safety, prevention and community health, and cost-effectiveness analysis.

One obvious and effective strategy to address the heavily skewed imbalance of primary care physician to specialist and subspecialist ratio is to substantially increase funding through the Title VII Training in Primary Care Medicine and Dentistry grant program, because the administrative mechanism is already in place to deliver these funds to communities and training sites to prepare the clinicians the U.S. public needs and deserves. A study comparing students in a Title VII–supported medical education program with those in a traditional medical program found that 86% of Title VII graduates planned to work in an underserved community, compared with 20% of graduates from a traditional medical program. (43) Another study found that residents in general medicine, family medicine, and pediatrics who received their training in residency programs that had Title VII grant funding reported being prepared to provide cross-cultural care across all 8 measures and feeling more skilled in crosscultural care for 6 of 10 measures. This outcome significantly exceeded the self-reported skills and confidence in cross-cultural care by residents trained in programs that did not receive Title VII funding. (44) A study of the impact of 25 years of Title VII funding to the establishment of the primary care internal medicine residency training program at Bellevue/NYU concluded that the Bellevue/NYU primary care residents outperformed their specialty colleagues on important measures, such as clinical productivity, patient satisfaction, and cost-effective care. (45)

When Title VII was reauthorized in the ACA, changes were made in the Title VII health professions training programs to provide funding for innovations in medical (and dental) education, and to reward formal partnerships between medical schools and residency programs with community health centers, rural health clinics, and area health education centers. These changes reinforce the direction of reform of health care delivery to enhance quality and patient satisfaction, and improve health outcomes especially for vulnerable and disadvantaged populations. Ideally, they will enable educators to develop new ambulatory training sites that promote careers in primary care.

Title VII's new areas of curricular innovation include training in chronic disease management and skills in providing care in the patient-centered medical home. Thus, priority is to be given to curricula that foster training in the use of interprofessional teams, and that integrate transitions of care and both physical and mental health in the care of patients. Educators are encouraged to apply for funding to plan and operate joint degree programs (MD-MPH training programs) again to provide interdisciplinary and interprofessional graduate education (to foster advanced skills in public health, behavioral health, disease prevention, and health promotion). Previous areas of educational innovation that qualify for priority funding—effective communication, evidence-based medicine, cultural competency, and use of health information technology in quality improvement and patient safety—have been continued. Special populations to be targeted have been expanded to also include persons with disabilities.

While the College was pleased to see a significant increase in funding for Title VII in the ACA, this funding is quite vulnerable because it is subject to annual appropriations. Title VII programs deserve a stable, robust funding source so that they can continue to fulfill the goals that have been set for them.

Conclusion

Millions of Americans do not have adequate access to health care services, physicians are not optimally distributed among specialties or geographically, and numerous studies warn of an impending physician shortage. Many areas of the country are already facing a shortage of primary care physicians for adults, and the expansion of coverage through health reform will only exacerbate this problem. A concerted effort must be made to achieve a health care workforce that is in line with the nation's needs. GME policy must be aligned with the nation's workforce policies and must consider supply, specialty mix, and site of training.

Glossary of Key Terms and Acronyms

Accreditation Council for Graduate Medical Education (ACGME): The Accreditation Council for Graduate Medical Education is a private, nonprofit council that evaluates and accredits medical residency programs in the United States.

Area Health Education Center (AHEC): The AHEC program is dedicated to addressing the shortage of primary care services, common to certain communities, by creating collaboration and partnerships between academic health centers and these communities.

Council on Graduate Medical Education (CoGME): An advisory body established by Congress "to provide an ongoing assessment of physician workforce trends, training issues and financing policies, and to recommend appropriate Federal and private sector efforts to address identified needs." Authorizing legislation calls for CoGME to advise and make recommendations to the Secretary of the Department of Health and Human Services, the Senate Committee on Labor and Human Resources, and the House of Representatives Committee on Commerce.

Diagnosis Related Group (DRG): A system used by Medicare and other insurers to classify illnesses according to diagnosis and treatment. DRGs reflect expected lengths of stay and predetermine hospital reimbursements.

Direct Cost of Graduate Medical Education (DGME): Medicare pays for its share of expenses directly attributable to the costs of a operating an approved GME program. Payments are intended to cover the costs of resident's salaries, compensation for teaching faculty and supervision, and associated overhead costs, such as the cost of classrooms and educational materials. Payment is based on the number of residents, a hospital-specific per resident amount based on 1984 costs updated for inflation, and Medicare's share of hospital inpatient days. Residents training at ambulatory care sites are included in the hospital resident count if the hospital assumes substantially all of the training costs. Effective January 1, 1998, Medicare may make DGME payments to "non-hospital provider entities" (ambulatory settings) for residents in approved GME programs.

Graduate Medical Education (GME): Medical training in an approved program of residency training, following completion of a four-year program leading to degree of doctor of medicine, involving the provision of patient care under supervision with progressively greater individual responsibility for patient care management.

Indirect Medical Education (IME) adjustment: The IME adjustment is applied to Medicare payments based on diagnosis related groups (DRGs) under Medicare's Prospective Payment System (PPS). For operating costs, the adjustment is based on the hospital's ratio of interns and residents to the number of beds. For capital costs, it is based on the hospital's ratio of interns and residents to average daily attendance. The IME adjustment is intended to reflect higher patient care costs associated with teaching programs for specialized care for more complex cases, the costs of additional tests and services ordered by residents, costs of research, as well as other costs associated with teaching programs.

Initial Residency Training Period: The minimum number of years required for completion of an approved program of graduate medical residency training, generally 3 years, but can be as much as 7 years. For Medicare funding purposes, the initial residency training period is the number of years required for an individual resident to become eligible to take his or her first board certification examination in the specialty he or she first began.

International Medical Graduate (IMG): A doctor who is a graduate of a medical school outside the United States that is not accredited by the Liaison Committee on Medical Education or the American Osteopathic Association. Medicare Payment Advisory Commission (MedPAC): An independent federal body established by the Balanced Budget Act of 1997 (P.L. 105-33) to advise Congress on a broad range of issues affecting the Medicare program, particularly payment issues.

National Healthcare Workforce Commission: The Patient Protection and Affordable Care Act created the Commission to serve as a national resource for Congress, the President, and states and localities; to communicate and coordinate with federal departments; to develop and commission evaluations of education and training activities; to identify barriers to improved coordination at the federal, state, and local levels and recommend ways to address them; and to encourage innovations that address population needs, changing technology, and other environmental factors.

Patient Protection and Affordable Care Act (ACA or PPACA): A federal statute that was signed into law by President Barack Obama on March 23, 2010. Along with the Health Care and Education Reconciliation Act of 2010 (signed into law on March 30, 2010), the Act is the product of the health care reform agenda of the Democrat-controlled 111th Congress and the Obama administration.

Residency Review Committee (RRC): The ACGME has 26 Residency Review Committees (one for each of the 26 specialties) that set and monitor education standards for training programs through program requirements. Each Review Committee comprises about 6 to 15 volunteer physicians.

United States Medical Graduate (USMG): A doctor who is a graduate of a U.S. medical school that is accredited by the Liaison Committee on Medical Education or American Osteopathic Association.

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