



AMERICAN MEDICAL ASSOCIATION

“Compendium of
graduate medical
education initiatives”

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American Medical Association “Compendium of graduate medical education initiatives” report

Introduction

The American Medical Association Council on Legislation (COL) and the AMA Council on Medical Education (CME) have long-focused on ways to improve graduate medical education (GME) to ensure medical students have the opportunity to fulfill training requirements and become practicing doctors. Recently, states have introduced legislation on Assistant Physicians, a unique role for unmatched students, which generated numerous questions regarding the governance, funding, and future of GME. To adequately address these concerns, this document seeks to provide background regarding the challenges faced by the current GME system. It then outlines GME initiatives. These include AMA, private and state efforts, which we hope will inform future GME advocacy.

Background

GME refers to any type of formal medical education after the receipt of an M.D. or D.O. degree in the United States. This includes intern, residency, and fellowship training. The current system is primarily funded by two streams of Medicare dollars: Direct Graduate and Indirect Medical Education, or DGME and IME, respectively. DGME payments are meant to cover direct training costs, such as salary, benefits, and administrative costs. IME, however, is provided to counter the additional costs thought to be associated with sponsoring teaching programs and providing patient care in training centers. Beyond Medicare, there are additional, smaller funding streams, including: state payments, the Department of Veterans Affairs, and the Department of Defense. Government funding of GME in 2012 was \$15 billion with \$9.7 billion coming from Medicare, \$3.9 billion from Medicaid, and \$1.4 billion from the VA.¹

Though Medicare and other government entities pay over \$15 billion annually for GME programs throughout the country, this funding does not fully cover the cost of maintaining teaching programs (approximately \$27 billion per year). Hospitals, training centers, and residency programs are also not required to report use of these funds and very few, if any, have public data on how these GME payments are utilized. DGME and IME payments also “differ significantly by state (beyond cost of living or care differences), as seen by metrics such as (a) the number of Medicare-sponsored residents per 100,000 population (77 in New York, 19 in California, 14 in Florida, 3 in Arkansas), (b) the average payment per resident (\$63,811 in Louisiana versus \$155,135

in Connecticut), or (c) the payments per state inhabitant (\$1.94 in Montana versus \$103.63 in New York).² In addition, salaries of residents have remained constant and have diminished in purchasing power over the years due to inflation.

Why reform GME?

The call for GME reform is two-fold. First, Congress developed the existing GME funding scheme several decades ago in 1965. Importantly, Congress intended this to be a temporary measure until a more suitable source of funding could be found. A Congressional report at that time stated: “Educational activities enhance the quality of care in an institution, and it is intended, until the community undertakes to bear such education costs in some other way, that a part of the net cost of such activities (including stipends of trainees, as well as compensation of teachers and other costs) should be borne to an appropriate extent by the hospital insurance program.”³ Stakeholders have since called for a restructuring of GME payment to reflect the changing health care landscape.

Second, the current system limits the number of training positions despite national and local needs. Undergraduate medical training has increased in both size and number. Enrollment in United States medical schools alone has increased by 23.4 percent, with 17 new medical schools established between 2002 and 2014.⁴ Additional expansions are expected to continue, with estimates that in the 2018-2019 academic year, enrollment in medical school will have increased by 30 percent from 2002.⁵ In addition, more international medical students are looking to train in the U.S. While the number of medical students continues to grow and the U.S. population continues to increase and grow older, parallel expansion in residency training has not ensued to the same degree. This is primarily due to the cap on government-funded residency positions since the Balanced Budget Act of 1997.

The Balanced Budget Act of 1997 used data from 1996 to set and project what was intended to be another temporary funding mechanism for GME. This funding structure has been in place ever since, limiting the number and location of training programs that can receive federal GME dollars. This cap, however, has not prohibited academic centers from funding their own residency positions in addition to the federally supported slots, leading to a modest increase in the number of residency positions. Yet, these programs

admit that their GME expansion is not based on workforce assessments. The most common reasons cited “[were] to expand service lines that generate revenue. Other reasons included recruitment of faculty or spouse, prestige, needing additional staff due to duty hours restrictions, and the local job market (for example, openings in nearby practices or the development of a new hospital).”⁶ Hence, the number of unmatched students continues to grow as residency positions fail to meet the demand of patients, local communities and medical graduates. This problem is reflected in the growing number of unmatched medical students. The most recent number of U.S. senior students without a residency position, following the main residency match, totaled 606 in 2015 alone, which does not include international medical graduates, previous graduates, or other non-traditional applicants. For those U.S. seniors who did not match this year and hope to reapply next year, their probability of match success plummets from 96 percent to around only 40 percent.⁷

Match Data, 2013-2015⁸

Year	Unmatched U.S. allopathic students	Unmatched U.S. osteopathic students	Total unmatched U.S. students	Total unmatched U.S. post-SOP
2013	1097	675	1772	591
2014	975	611	1586	506
2015	1093	610	1703	606

There are multiple matching programs, outlined below. The National Resident Matching Program (NRMP) sponsors 21 specialty matches, and releases all placement results to applicants in March; the San Francisco Matching Program (SFMP) sponsors the Ophthalmology, Neurotology, and three-year “Advanced” Plastic Surgery residency matches, with January, October, and May placement notifications, respectively. The American Urological Association (AUA) sponsors the Urology match, which notifies candidates of placement results in January. “During the past decade, several specialties have moved from the SFMP ‘early match’ to the NRMP regular match: Otolaryngology (2007), Neurology (2007), Neurological Surgery (2009), and Child Neurology (2012). [Also,] the Accreditation Council for Graduate Medical Education (ACGME) announced in 2014 that it will merge with the American Osteopathic Association (AOA) to create a single accreditation system for graduate medical education, which will soon lead to a combined match system for M.D. and D.O. graduates.”⁹ In 2013, the NRMP enacted a rule that for an applicable residency program to list any position through their website, they must list ALL residency openings, leading most programs to participate in the NRMP match. However, a handful of independent programs still exist outside of these match programs and must be contacted directly for applications.

The above systems encompass almost every residency program in the United States. Exceptions to the above match programs include:

- **Military Match:** available to military personnel only.
- **Rural Scholars Program:** students graduate medical school in three years after committing to a primary care training program at that school.
- **Family Medicine Accelerated Program:** students commit to Family Medicine and are channeled into that track in three years.
- **Post-SOP Positions:** for applicants who match into PGY-2 positions, but fail to match into a PGY-1 position, preliminary positions can be created by programs after the SOP concludes in order to bridge the applicant to their match commitment.
- **Off-Cycle Appointments:** positions that begin prior to February 1 can be offered outside of the match. These are oftentimes openings created by an unplanned absence of a trainee.¹⁰

Current GME initiatives

Several stakeholders have offered potential GME reforms. While these proposals differ, the following outlines key aspects from some of the most recent proposals and prominent organizations that are being considered as alternatives to the current funding and governance of GME.

In 2012, Hospital Corporation of America (HCA), America’s largest for-profit hospital system, announced it would be opening hundreds of new residency positions throughout Florida to address growing numbers of unmatched medical students as well as the need for trained physicians in Florida. While the hospital system stated it would fund part of this expansion itself, they also expected to tap into Medicare dollars. They have the ability to do so as programs that have never before housed residents; these “GME naïve” sites can access Medicare money to add to the cap.¹¹ Similar expansions by HCA have occurred in additional states as well, taking advantage of this funding opportunity.

Federal legislation for GME expansion

The Veterans Affairs (VA) system is the largest provider of healthcare training in the United States. However, 99 percent of their programs are sponsored by outside medical schools or teaching hospitals. Functionally, this limits the amount of expansion that can occur in the VA system, as those who train at VA locations must still be housed under a third-party GME program with full accreditation and administrative functioning. The Veterans Access, Choice and Accountability Act of 2014 (“Choice Act”) passed in the

113th Congress was a bipartisan response to the issues occurring in the VA health system and sought to "...increase its number of Graduate Medical Education residency positions by up to 1,500 [with] an emphasis ... on creating residency positions that improve Veterans' access to primary care, mental health, and other specialties the Secretary deems appropriate."¹² A conference was held in April 2015 to begin brainstorming on ways in which this goal can be realized, though much of the conversation centered on nursing competencies and the expansion of existing nursing programs within the VA.¹³ Recently, the VA approved over 200 of these residency positions in Phase 1 of the program. The law required the following with respect to the new positions:

- Only permitted for ACGME or AOA accredited programs;
- Adherence to health care priorities: Primary Care, Mental Health, New GME sites and Critical Access Needs
 - Primary Care includes Internal Medicine, Family Medicine, and Geriatrics
 - Mental Health includes Psychiatry and all subspecialties

The positions approved in Phase 1, to start on July 1, 2015, break down into the following areas:

VACAA initiatives	Number of residents
Primary care	73.8
Mental health	57.8
New and expanding GME sites	37.8
Critical needs	28.2
Rural health	6.7
Totals	204.2

The VA plans to add an additional 200-325 positions per year from 2016-2019.¹⁴

The AMA has strongly supported key GME legislation that addresses the changing needs of patients and our health care system. In 2015, the AMA supported GME provisions included in SGR repeal legislation that would provide funding through 2017 for the National Health Service Corps Program and for community and teaching health centers.¹⁵

The AMA has offered support for the Creating Access to Residency Education (CARE) Act of 2015 (H.R. 1117) which was introduced by Representative Kathy Castor (D-FL). The CARE Act would authorize \$25 million in grants for new GME positions in states with a low ratio of medical residents (fewer than 25 residents per 100,000 individuals). Through these grants, the Federal government would fund two-thirds of each primary care residency position. For other specialties, Federal grants would fund half of the cost of each position.¹⁶ The CARE Act offers a creative solution to GME funding and

workforce concerns by establishing federal matching grants, in partnership with other stakeholders, to support new residency positions targeting underserved populations.

Additionally, Senators Bill Nelson (D-FL), Charles Schumer (D-NY), and Senate Minority Leader Harry Reid (D-NV), as well as Representatives Joseph Crowley (D-NY) and Charles Boustany, Jr., M.D. (R-LA) re-introduced The Resident Physician Shortage Reduction Act of 2015 (S. 1148 and H.R. 2124). This legislation would increase the number of Medicare supported residency positions by 3,000 per year from 2017 to 2021, for a total of 15,000 additional positions. Half of these positions would be reserved for specialties with shortages (defined by the Health Resources and Services Administration), with additional priority given to VA-affiliated medical centers, electronic health record meaningful users, states with new medical campuses, and programs with a community component. The bills also require the Government Accountability Office to study strategies to increase workforce diversity, as well as directs the National Health Care Workforce Commission to study the physician workforce.^{17,18} The AMA has written and sent letters of support for this legislation.

Institute of Medicine (IOM)

In July of 2014, the IOM released a report entitled "Graduate Medical Education That Meets the Nation's Health Needs Recommendations, Goals, and Next Steps" that has since incited serious debate as to how the current GME structure and financing should be overhauled. The major recommendations of the report are outlined in Appendix A.

Most recently, Gail Wilensky, PhD, co-chair of the IOM committee tasked with the creation of this report, published an essay as a follow up. Highlights of the essay are as follows:

"Last December, a bipartisan group of eight representatives on the House Energy and Commerce committee asked stakeholders to comment on the IOM report and on other approaches to GME reform...The presumption is that the Energy and Commerce committee will hold a hearing at some point and invite the stakeholders to discuss their submitted comments. No date for such a hearing has yet been announced though."

"We concluded that attempts to forecast physician supply and demand, both in the aggregate and by broad specialty types, have been singularly unsuccessful in the past... The biggest problem is that most models use existing physician-to-population ratios to project the number and type of physicians needed in the future. Implicitly this approach assumes that the current way of producing medical care is the only way to do so. Rarely a good assumption, it makes even less sense than usual in this era of rapid changes to how we are delivering and paying for care."

"Furthermore, our supply of physicians has already been increasing rapidly, even without additional federal funding. Medical school enrollment rose 28% between 2003 and 2012 and the number of residents rose by about 20 percent despite the cap on Medicare funded positions."¹⁹

American Medical Association (AMA)

Following the IOM report, the AMA submitted comprehensive comments to the House Committee on Energy and Commerce in response to their questions on GME. The letter outlined the following improvements to secure a more stable and effective physician workforce for our nation:

- Remove the existing arbitrary cap on publicly funded residency positions;
- Increase the number of GME positions to address future physician workforce, regional, and specialty needs;
- Promote educational experiences in the broadest possible range of educational sites, so that residents are experienced in the types of settings in which they may practice after completing GME; and
- Actively explore additional sources of GME funding, including states and all-payer models, to ensure adequate and stable support for medical education programs.

The letter highlighted that Medicare support has been pivotal to the training of physicians and cautioned that decreasing this built-in sustainability could have serious consequences for patients and care improvements. It also offered that all-payer models could provide more comprehensive funding and highlighted state activities to support GME and training opportunities. These are the most recent recommendations offered by the AMA but build on lengthy advocacy and study.

The AMA Council on Medical Education has completed extensive and exceptional work on this topic in the past and continues to work tirelessly for the improvement of graduate medical education. The most relevant report coming forth at A15 is entitled "The Value of Graduate Medical Education" and chronicles the history, process, funding mechanisms, and value of the current GME system. The Council on Medical Education then includes the following recommendations:

1. That our American Medical Association (AMA) utilize its resources to share its content expertise with policymakers and the public to ensure greater awareness of the significant societal value of graduate medical education (GME) in terms of patient care, particularly for underserved and at-risk populations, as well as global health, research and education.

2. That our AMA revise Policy D-305.967, "The Preservation, Stability and Expansion of Full Funding for Graduate Medical Education," to read as follows: "8. Our AMA will vigorously advocate for the continued and expanded contribution by all payers for health care, (including the federal government, the states, and local and private sources) to fund both the direct and indirect costs of GME."
3. That our AMA advocate for the appropriation of Congressional funding in support of the National Healthcare Workforce Commission, established under section 5101 of the Affordable Care Act, to provide data and healthcare workforce policy and advice to the nation and provide data that supports the value of GME to the nation.
4. That our AMA support recommendations to increase the accountability for and transparency of GME funding and continue to monitor data and peer-reviewed studies that contribute to further assess the value of GME.

A full listing of AMA policy relevant to GME is provided in *Appendix B*.

Council on Graduate Medical Education (COGME)

Recommendations:

1. GME training should be expanded in ambulatory and community sites to reflect the current and evolving practice of medicine.
2. A portion of the financial support for GME training in community and ambulatory settings should be distributed to the educational sites or programs where the training occurs.
3. There should be greater accountability and transparency for Indirect Medical Expenditures in order to achieve national health care aims and objectives. Reevaluation of the funding process of GME is necessary to ensure equity, proper distribution of specialties, location, and geographical distribution of residents.
4. GME funding for the Teaching Health Centers (THC) and Children's Hospitals should be stabilized with dedicated ongoing funding.
5. New curriculum is needed to address health care delivery system change and patient and population-centered GME.
6. There should be a further national effort to coordinate and engage underrepresented minority students in health care professions and medical careers. Public support for GME should be leveraged to encourage physician specialists to locate in otherwise underserved regions and communities.
7. COGME should be strengthened by reconstituting the Council to provide strategic planning and oversight of GME innovation and funding with responsibility and

authority to evaluate the accountability and outcomes of GME. Funding and programmatic support for COGME should be enhanced and must be adequate to execute the strengthened agenda of COGME.²⁰

Association of American Medical Colleges (AAMC)

The AAMC has prioritized GME reform and has recommended that Congress increase the number of Medicare-supported GME training positions by at least 4,000 new positions each year. According to the AAMC, 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 their projected physician 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 IMGs to continue to occupy about 10 percent of training positions. 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 endorsed GME expansion bills in the 113th Congress 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).^{21,22}

The Training Tomorrow's Doctors Today Act (H.R. 1201) offers fairly significant reform to the GME system. The bill would increase the number of Medicare slots by 15,000 and direct the Health and Human Services (HHS) Secretary to implement a budget-neutral Medicare IME Performance Adjustment Program. Additionally, the bill would require additional transparency in the system by requiring: the HHS Secretary to submit to congress and annual report on GME payments; the GAO to report on physician shortages; as well as a number of other layers of accountability. The bill also could call for a series of technical and administrative changes.²³

American Academy of Family Physicians (AAFP)

Reflecting its focus on family physicians, the AAFP has offered the following GME proposals:

1. Limit payments for DGME and IME to training for first-certificate residency programs.
2. Establish primary care thresholds and maintenance of effort requirements applicable to all sponsoring institutions and teaching hospitals currently receiving Medicare and/or Medicaid GME financing.

3. Require all sponsoring institutions and teaching hospitals seeking new Medicare- and Medicaid-financed GME positions to meet primary care training thresholds as a condition of expansion.
4. Align financial resources with population health care needs through a reduction in IME payments and allocation of those resources to support innovation in GME.
5. Fund the National Health Care Workforce Commission²⁴

Heritage Foundation

The Heritage Foundation has urged lawmakers to pursue a reform agenda based on the following four principles:

1. Government funding should be consolidated.
 - Any government support for GME should be in the form of a single payment stream, and payments should be based on the combined direct and indirect expenses associated with the training programs.
2. States should manage public GME funding.
 - While the vast majority of public funding for GME comes from the federal government, state governments are in a better position to manage public funding of GME more effectively.
3. Funding should follow the trainee.
 - The purpose of public GME funding should be to meet the public need for qualified medical professionals, not the parochial revenue needs of teaching institutions.
4. Federal funding should encourage, not supplant, state and private-sector support.
 - As appropriate, the burden of GME funding should be realigned across all relevant stakeholders.²⁵

Program on Health Workforce Research and Policy at the Cecil G. Sheps Center for Health Services Research

This center run out of the University of North Carolina has researched and offered the following GME reforms:

1. States should develop ongoing physician workforce data collection systems that allow policy makers to continuously identify the changing workforce needs of the state.
2. States should create a GME advisory entity that promotes discussion, coordination and education about GME.
3. All payer, third-party payer, Medicaid and state appropriations for GME need to be carefully considered and designed to be responsive to the state's population health needs.

4. New GME funding should be tied to performance metrics and require monitoring about how funds are spent.
5. State policymakers should coordinate efforts that touch on the physician's entire career from medical school admissions through graduate medical education and into practice.²⁶

State initiatives

Unique models are being used across the country on the state-level to try to preserve or expand residency training funding in the face of stagnant Medicare contributions. The AMA Council on Medical Education has prepared Report 7 with a list of these initiatives through 2014. See *Appendix B* for the complete list.²⁷

States have also been trying to obtain alternative solutions to the growing problem of unmatched medical students. One way that some states have addressed this problem is through the creation of "Assistant Physician" type positions. Most recently, the state of Kansas passed legislation allowing for University of Kansas School of Medicine graduates to obtain a limited, time restricted permit to practice medicine in underserved areas without having to have completed residency. Similar legislation has been passed in Missouri and Arkansas, with some variation. Oklahoma introduced similar legislation that failed to advance. An expanded chart of similarities and differences between "Assistant Physician" legislation can be found in *Appendix E* below.

Regional medical education: The WWAMI experiment

Regional medical education is a concept catching on in states working to not only increase the number of medical students and residents in the state, but also use physician training to expand access to care in rural and underserved areas. In the early 1970s, the University of Washington took on a bold challenge to train and prepare physicians to care for patients and communities throughout the states of Washington, Alaska, Montana and Idaho (Wyoming joined in 1996). This regional medical education program known as WWAMI (an acronym representing the states it serves) has been heralded as one of the most innovative medical education and training programs in the country.²⁸

The program has five primary goals:

1. Provide publicly supported medical education;
2. Increase the number of primary-care physicians;
3. Provide community-based medical education;
4. Expand graduate medical education (residency training) and continuing medical education; and
5. Provide all of this in a cost-effective manner.

For more in-depth look at the WWAMI program see *Appendix C*.²⁹

International medical graduates

Physicians educated in other countries who seek GME in the United States are known as international medical graduates (IMGs). They provide much-needed patient care, since many of them train in and enter primary care specialties and serve in underserved and shortage areas, including inner-city and rural areas. Non-U.S. citizen IMGs who are on an Exchange Visitor Visa (J-1) during their GME training may apply for a J-1 Visa waiver that allows them to stay in the United States after training, if they agree to work in an underserved area or shortage area. Since 1994, when the J-1 Visa waiver program was initiated, over 9,000 IMGs have been granted waivers.³⁰ Without these IMGs, thousands of patients would be without a physician in their communities. IMGs play a critical role in caring for the country's neediest patients. In 2012, federal legislation was signed into law to extend to September 2015 the Conrad State 30 J-1 Visa Waiver Program, a vital program for placing IMGs in communities that face health care access challenges.³¹ The AMA supports the permanent reauthorization and expansion of the Conrad State 30 J-1 Visa Waiver Program.³²

More and more U.S. citizens (USIMGs) are receiving degrees from Caribbean (and other foreign) medical schools, but are actually completing several years of medical school training at host schools inside the U.S. (a fact not widely known or understood by the public). The 2014 FSBM Census of Actively Licensed Physicians in the U.S. delineates the increasing number of individuals graduating from Caribbean medical schools, and the attached data from the NRMP shows discrepancies in match rates for USMGs, IMGs, and USIMGs.³³ The percentage of IMGs who match to primary care positions in the U.S. is actually quite high.³⁴

The growing number of U.S. citizens choosing to attend medical school in the Caribbean and elsewhere are more challenged at obtaining residency positions, and thus a license to practice medicine. (5) Recent legislation introduced by Senator Dick Durbin, S. 1374, the Foreign Medical School Accountability Fairness Act of 2015 would amend the Higher Education Act of 1965 to require all foreign medical schools to meet minimum requirements for percentage of foreign students and for percentage of students passing exams administered by the ECFMG in order for students to be eligible for federal student loans.

The goal of this legislation is "to establish fair and consistent eligibility requirements for graduate medical schools operating outside the United States and Canada," in order to "increase accountability and protect American students and taxpayer dollars."³⁵ If implemented, it will be important to

monitor the effects of this legislation on USIMGs and the medically underserved areas which have traditionally relied on physicians trained outside of the United States for their care.

Proposals for GME reform

The following section outlines A.) considerations for GME reform and B.) alternative routes for medical students who fail to match, and includes points for consideration that interested stakeholders may want to address. These are only initial thoughts that should be expanded further to fully assess these proposals, and are by no means exhaustive.

Part A: Considerations for GME reform

Percentage of reimbursements and/or insurance plans for GME funding

A certain percentage of all claims/reimbursements would go towards the funding of GME. Alternatively, insurance providers could contribute a set percentage of each plan's payment into a central GME fund.

Opportunities:

- Precedent: In 2013, House Bill 1176 in the California State Legislature proposed a \$5 per covered life fee for health insurers designated to support GME in the state.
- Removes the reliance on Medicare funding. Medicare would still be responsible for providing a large percentage of the funding but private insurance companies would also shoulder part of the cost of GME training.
- Small cost spread among all of those who receive healthcare.

Challenges:

- This legislation did not pass and does not have a high likely hood of passing in the future.
- Insurance companies unlikely to take on burden without raising costs to purchasers.
- Difficult to legislate, would require an entirely new payment body, system, collector.

Questions for consideration by stakeholders:

- How to get buy-in from insurance providers?
- Would a percentage from all billing codes go towards GME?
- What should that percentage be?
- How can this be flexible with time and change in the system?

All-payer model

All relevant payers and stakeholders (hospitals, states, community health centers, insurance companies, etc.) would play a role in funding.

Opportunities:

- Precedent: In Idaho, an insurer provided \$400,000 for four years to support rural GME training. In North Carolina, the Blue Cross Blue Shield Foundation contributed funding, along with the Duke Endowment Foundation and the University of North Carolina, to support two new family residency positions over three years at a Prospect Hill Community Health Center, a Federally Qualified Health Center serving a rural, medically underserved, majority Spanish-speaking population.
- Special interests or highly needed areas/specialties could finance positions to address micro needs of a community.
- Communities, states, and private parties could all have a larger contribution in the training of physicians. The pipeline could be tailored more specifically to each groups' needs.
- Provides a new revenue source without the need to seek federal government offsets.
- Example: "Maryland hospitals do not receive direct GME payments from Medicare or Medicaid and therefore Maryland hospitals do not fall under the Medicare caps; rather, GME payments, as well as uncompensated care and other community benefit costs, are built into the rate for hospital services. Thus, Medicare, Medicaid, and third party payers all contribute the same amount for GME."

Challenges:

- In Idaho and North Carolina, foundation funding was provided for program start-up and will not be sustainable over the long term.
- State appropriated funds are subject to temporal swings due to the political climate and priorities of the state legislature. In the case of New York, pooled funds once earmarked for GME were reallocated to other, more highly prioritized health system needs.
- An all-payer system is unlikely to address concerns about the distribution of GME positions by specialty and geography.
- Limits the pressure on the government to continue funding GME through Medicare dollars. Creates instability with potential year-to-year changes in funding sources.
- Example: Maryland
 - "In the recent past, no hospital has approached the [Health Services Cost Review Commission] HSCRC

to request funding for new residency programs or positions and no additional funding for GME has been provided.”

- “Third party payers are not likely to contribute to GME even though they benefit from it. Either third party payers must be mandated to contribute by legislation, or there must be incentives in place that make contributing to GME serve their interests.”
- “IME is difficult to separate from disproportionate share payments... HSCRC sets the rates that hospitals are able to charge for services, but does not have a role in determining how GME funds are spent. If an institution decides to expand or reduce GME programs or positions, the HRCSC may not be aware of these changes”³⁶

Questions for consideration by stakeholders:

- How to encourage third parties like insurance companies, communities, and hospitals to continue/begin funding residency positions?
- Who would be the central governing body of these funds?
- How to ensure this program’s long-term sustainability?

Payments tied to quality measures or performance metrics

Quality measures and performance metrics would be used to allocate GME funding, or a portion of such funds.

Opportunities:

- Could help ensure appropriate level of training for students. In recent years, there has been criticism that residents are not ready for practice.
- Could help move to a competency based GME system instead of a time-based training program.
- Transparency, quality, and efficacy are the new buzzwords of the changing healthcare landscape. Could incorporate these to a larger degree.
- Metrics could target care in underserved areas or populations.

Challenges:

- A system based on quality metrics may provide the wrong incentives for training. Trainees are supposed to be given the space to make mistakes; by placing additional metrics on top of them, the incentive structure could negatively affect the training environment. “Teaching to the test/metrics” mindset.
- Would require significant changes in how to run programs and may need to change medical school curriculum.

- Meaningful quality metrics are difficult to create and maintain.
- Limited to no stability if a program fails to achieve certain metrics.

Questions for consideration by stakeholders:

- Who would create the metrics?
- What body would be responsible for ensuring programs follow these guidelines?
- Would this look like MU/PQRS for residents?

“Grown Your Own” approach of Kaiser Permanente

Kaiser Permanente has a medical education pipeline that combines CMS funds with its own revenue stream. The Kaiser Foundation Health Plan (the insurance arm of Kaiser) devotes a percentage of its revenue to a community pool that then funds any additional cost of residency training above the Medicare cap. Roughly 50 percent of Kaiser Permanente GME graduates are then employed in the Kaiser system. In addition to their two training locations, Kaiser hosts over 900 residents through their affiliate training programs for 1-6 months. Because ~50 percent of their “home” residents, plus many from this rotating pool are then employed by the Kaiser system, Kaiser can make up these costs by avoiding recruitment, retainment, and administrative time associated with new hires. In 2013, Kaiser stood as the only third party payer who directly contributed to supporting GME.³⁷

Opportunities:

- Reap downstream benefits from GME programs by avoiding recruitment, marketing, retraining expenses. Seamless transition to practice.
- Gives both health systems and residents additional incentives to work well together and for each other. Potential career stability.
- Would still maintain CMS funding stream; would not disrupt existing system to a large degree, simply supplements what is already in place.
- Could have communities buy-in and fund residents to train at alternative locations through partnerships.

Challenges:

- Incentivizing programs to begin would be difficult due to large set up cost to start these programs.
- Would need a large GME office to support the additional responsibilities the center takes on to adequately fund, train, and support these residents.
- Would not necessarily address the misdistribution, as large academic medical centers already train most residents whom stay and practice close by.

Questions for consideration by stakeholders:

- How to incentivize health systems to create and fund these programs?
- How could smaller v. larger programs actually have the ability to do this?

Teaching Health Center (THC) and Primary Care Residency Expansion (PCRE) grants

In 2010, the U.S. Department of Health and Human Services appropriated over \$167 million for the Primary Care Residency Expansion (PCRE) program. In 2011, grants from the PCRE program were provided to residency programs in the specialties of family medicine, internal medicine, and pediatrics, allowing them to increase the number of residents in their programs. Seventy-seven programs received grant funding, and 504 primary care resident positions were created. The grants provide 5 years of funding for these positions.

Opportunities:

- Link GME training to needed specialties and geographic areas, shifting training from hospitals to ambulatory settings.
- Unlike residency programs at hospitals, THC residency programs are required to report on physician production metrics, which introduces a level of accountability not seen in other sources of Federal GME funding.
- Could expand this program not only for primary care positions, but to all needed specialties.

Challenges:

- Lack of sustainability has made recruitment difficult; uncertainty makes programs difficult to run and sustain. Funding ends in 2016 for the first round. "Overall, 82.5% of respondents had not yet identified funding to support the PCRE expansion positions after 2016."³⁸
- Quality and production metrics are controversial in the training setting.
- Unlikely to gain wide support and address shortages if this remains eligible to primary care specialties only.

Questions for consideration by stakeholders:

- Federal appropriations are difficult and frequently limited. How could this program feasibly expand?
- How could communities, hospitals, other third parties buy in to supporting future funding of these programs once initial grants end?

Governance board to decide needs

A state would create and run its own governance board to decide needs and training capability.

Opportunities:

- Precedent: From 2003 until 2010, the Utah Medical Education Council managed a CMS demonstration project to allocate Direct Medicare GME funds. During the period of the CMS waiver, Utah saw a net growth of 37 percent in FTE GME positions (225 positions), including 45 FTE positions that grew outside of the CMS waiver via the efforts of the GME consortium. This GME growth outside the waiver was the result of teaching hospitals restructuring and reallocating their GME program funds based on the UMEC's recommendations.³⁹
- Payments by physician specialty were held at a constant rate, regardless of where a resident trained.
- Could more accurately approach physician shortages or misdistributions as residents are likely to stay within a certain radius of where they trained for residency.
- Could have the flexibility on a yearly basis to weather changing needs of population.

Challenges:

- Many of the groups (Utah included) came together on an ad hoc basis or were temporary in nature to advocate for specific policy changes; few have had a sustainable and coordinated role in state GME policy.
- Payments did not take into account cost-of-living, cost of training, or specialty differences.
- Could remove consistency of funding streams from programs that need stability to function at their highest level.
- Could become too cumbersome, prescriptive, and expensive. High administrative costs.

Questions for consideration by stakeholders:

- Where would the funding for these governance boards come from?
- How does this solve the issue of GME funding streams?
- Who would be appointed to these boards?

Combine IME with DGME

There would be combined DGME and IME payments to increase transparency and simplify funding streams, which would require the need to create new reimbursement formula.

Opportunities:

- Could introduce more transparency and allow for accountability of funds.
- Streamlined payment structures.
- Could use as a stepping-stone to more meaningful GME reform.

Challenges:

- Would require extensive legislation to overhaul the current statutory provisions.
- Does not address the misdistribution or shortage issue and does not add more positions.
- Hospitals unlikely to support this change, as they benefit from the current structure.

Questions for consideration by the councils:

- What is being meaningfully accomplished with this plan?
- What transparency and quality metrics would actually be used?
- How would this benefit hospitals? Trainees?
- Would this actually simplify the payment streams? (Other options include allowing IME to stay with the institution while DGME follows the student to support training in other care settings.)

Per resident payment amount

Each program would receive one lump sum payment per year associated with each resident they train.

Opportunities:

- Enables residents to train at a more flexible number of locations. For example, residents could have the flexibility to train in more rural, community based, or underserved areas by "carrying" their own funding stream with them.
- Would be able to alter payments by cost of living/ specialty/etc.
- Could rearrange formulas to take into account training environment. For example, surgical residents require a higher amount of supportive funding than a psychiatrist would, as a surgical resident would go through expensive training supplies while a thought-based trainee would not.

Challenges:

- Government may not fund training if trainees not working directly with Medicare population.
- Unclear how accountability would work. How would funds actually "travel" with the resident? Creates instability in stable training programs. Hospitals and large academic centers unlikely to be on board.
- Challenging to justify different payments based on specialties.

Question for consideration by stakeholders:

- Should payments differ by specialty/cost of training? Location? Cost of living?

Tax breaks for hospitals that privately fund residency positions

Hospitals funding residency positions would receive tax relief.

Opportunities:

- Instead of getting dollars from the government to fund residency, training facilities could instead receive tax subsidies. This could increase the number of locations and environments in which a resident could train.
- Increases incentive for smaller locations to open and train residents.
- Does not directly cost money as a line item on a page; may be easier to legislate v. additional funding going towards GME.

Challenges:

- Many hospitals currently receive various and complicated tax breaks. However, no GME or training specific examples exist.
- Would need oversight and governing body, or additional administrative time and paperwork to determine which locations are eligible.
- Government revenue decreases

Questions for consideration by stakeholders:

- What steps would it take to enable this to happen?
- Does this occur on a federal v. state level?
- How to incentivize the government to agree to a "tax cut" especially for large hospital systems?
- How to ensure this money is actually going towards the training of residents?

“Bed-tax”: A state provider tax/assessment/fee

“In general, a “provider tax,” sometimes termed a “fee” or “assessment,” is a state law that authorizes collecting revenue from specified categories of providers. In most states, it is used as a mechanism to generate new in-state funds and match them with federal funds so that the state gets additional federal Medicaid dollars.”⁴⁰

Opportunities:

- Almost every state currently imposes this or a similar tax. “In a majority of cases, the cost of the tax is paid back to providers through an increase in the Medicaid reimbursement rate for their patient treatment and services.”
- States can earmark collected revenue for any state purpose. For example, several states currently fund high-risk pools via this mechanism.
- Taps into both additional state and federal pools of money, not subtracting from other existing programs, “increasing the pie.”

Challenges:

- The cut to the provider is not always reimbursed, and can be as high as 6 percent in some cases.
- No states currently earmark money to go towards GME funding; state-by-state differences create inconsistencies and differences.
- Different states have different regulations around the collection and use of these monies. Inconsistent.

Questions for consideration by stakeholders:

- How to incentivize states to begin earmarking these funds to go to GME?
- Could specific tax on only those receiving Medicare or Medicaid actually be imposed?

Increasing grant money to GME training

Blue Cross (as an example) has a robust Grant program run out of their foundation arm on a state level that uses profits to hand pick and fund projects that fit the needs of the community.

Opportunities:

- Additional source of funding outside the government; most states currently concentrate on addressing low income needs, which could include ensuring providers are in the right areas.
- Could micro target specific areas or specialties to address the needs of the community.
- Increases the pool of players and funds involved in contributing to GME.

Challenges:

- State reform, which may be inconsistent.
- No longevity; at the whims of the foundation/funding source.
- No precedent other than Kaiser model (which only roughly approximates this idea).

Questions for consideration by stakeholders:

- This is not something that could be achieved via legislation; would have to individually advocate on a grassroots level for each foundation?

Part B: Alternative routes for medical students who fail to match

Assistant physicians

A position created in Missouri, Oklahoma, Arkansas, and Kansas for students who have completed medical school, but have not matched into a residency. The specific legislation, requirements, and limitations vary by state. See *Appendix E* for Comparison Chart of Existing State Bills.

Opportunities:

- Since there will be more students than available residency positions in the near future, students who do not match will need alternative career paths. These routes could temporarily provide unmatched students with a medically oriented path while they reapply.
- Allow students to stay “sharp” and competitive if they intend to reenter the match; limit these positions to students who intend on reentering the Match only.
- Could work in underserved/understaffed environments to help alleviate the doctor shortage/workload.
- Could assist in administrative roles to help counter regulatory burdens.

Challenges:

- Could unintentionally prolong medical education by becoming the new “standard” of training between medical school and residency.
- Quality of student education is unclear—no educational component required in this pathway. They may not be seen as more competitive upon reentry into the matching process.
- Scope of practice issues—limits MUST be placed. Time limit of 2 years, must be shoulder-to-shoulder oversight, no autonomous practicing, limits on ability to prescribe medication, order tests, order DME, etc.
- Medical school graduates risk stagnation in this role and never moving on to full training.

Questions for consideration by stakeholders:

- What practice sphere would they work in (e.g., that of an NP? PA? Intern?)
- What are their prescribing abilities and supervision requirements?
- How to ensure the quality of student entering these programs?
- Do all medical students deserve to go on to a residency training program?

Program-specific “5th year” or research + clinical programs for unmatched graduates

Programs create their own internal tracks for unmatched students to enter post medical school that enable them to stay competitive for the next year's match by allowing them to do a mix of research and supplemental clinical rotations, like a 5th year of medical school.

Opportunities:

- Example: UC Davis Department of Urology has a two-year research track that allows students to also participate in clinical activities before they reapply.
- Build resume with both publications and additional clinical time to hone skills.

Challenges:

- Not consistent between schools, not many programs like this.
- Schools would be required to pay students out of their own funding; would be difficult to get universities on board. If schools do not pay, then students take on an additional year of loans, furthering their debt.

Questions for consideration by stakeholders:

- Would it actually make these students significantly more competitive?
- Would it increase the number of years students have to train by becoming a new standard?
- Would it make it more challenging for first years applying to the match?

Master's programs for non-matched medical students

Medical schools would develop relationships with various masters programs to funnel non-matching students into those programs.

Opportunities:

- Students stay engaged in the learning environment.
- If students do not match in subsequent years, they are

more competitive on the jobs market with an MD and a master's degree.

Challenges:

- Students would take on additional debt of another year of schooling without guarantee of matching next year.
- No ability to build clinical skills. Have to find programs willing to take on students.

Questions for consideration by stakeholders:

- How do you incentivize universities to take MD students after masters programs have already accepted their new class (as application timelines do not align)?
- Would it actually make these students significantly more competitive?
- Would it make it more challenging for first years applying to the match?

Increase the number of “transitional years,” “traditional rotating internships,” and “intern years”

Residency programs could selectively expand first year positions for more medical students.

Opportunities:

- Some specialties require a “traditional rotating” or “transitional” year first, then you match into the program the second year (predominantly for DOs, or specific specialties.) Some states require it for DO licensure.
- During this yearlong position, you could take Step 3 of the USMLE Exam to be able to practice without supervision.
- Could help alleviate physician shortage by allowing these practitioners to solo practice in underserved areas.

Challenges:

- Gives your loans an extra year to grow if you decide to do an ACGME residency that does not recognize AOA-accredited rotating internships. No guarantee of matching into a PGY-2 program.
- Unclear what career paths would be available after completing only an intern year.
- Does not solve the full problem of lack of residency positions, only prolongs it one more year. However, this year could be key in practicing solo in some capacity.

Questions for consideration by stakeholders:

- What is your actual scope after you pass USMLE Step 3?
- Is this chipping away at a physician's true scope of practice?
- Would this create another mid-level provider?

Appendix A: The IOM Report

Goals and Recommended Next Steps for Reforming Medicare Graduate Medical Education (GME) Governance and Financing.

Goals for Future GME Funding	Recommended Next Steps
Goal No. 1 Encourage production of a physician workforce better prepared to work in, help lead, and continually improve an evolving health care delivery system that can provide better individual care, better population health, and lower cost.	<ol style="list-style-type: none">1. Amend Medicare statute to allow for a new Medicare GME performance-based payment system with incentives for innovation in the content and financing of GME in accord with local, regional, and national health care workforce priorities.2. Create a high-level GME policy and financing infrastructure within the Department of Health and Human Services (HHS) and the Centers for Medicare & Medicaid Services (CMS) with responsibility for federal GME policy, including development, testing, and implementation of new payment methods. <p><i>See Recommendations 1, 2, 3, and 4.</i></p>
Goal No. 2 Encourage innovation in the structures, locations, and designs of GME programs to better achieve Goal #1.	<ol style="list-style-type: none">1. Amend Medicare statute to allow for a new Medicare GME performance-based payment system with incentives for innovation in the content and financing of GME in accord with local, regional, and national health care workforce priorities.2. Create a high-level GME policy and financing infrastructure within the Department of Health and Human Services (HHS) and the Centers for Medicare & Medicaid Services (CMS) with responsibility for federal GME policy, including development, testing, and implementation of new payment methods. <p><i>See Recommendations 1, 2, 3, and 4.</i></p>
Goal No. 3 Provide transparency and accountability of GME programs, with respect to the stewardship of public funding and the achievement of GME goals.	<ol style="list-style-type: none">1. Require standardized reports from sponsoring organizations as a condition for receiving Medicare GME funding.2. Develop a minimum dataset for sponsors' reports to facilitate performance measurement, program evaluation, and public reporting.3. Develop performance measures to monitor program outcomes with respect to those goals.4. Provide easy access to GME reports for the public, stakeholders, researchers, and others. <p><i>See Recommendation 2.</i></p>
Goal No. 4 Clarify and strengthen public policy planning and oversight of GME with respect to the use of public funds and the achievement of goals for the investment of those funds.	<ol style="list-style-type: none">1. Create a high-level GME policy and financing infrastructure within HHS and CMS with responsibility for federal GME policy, including development, testing, and implementation of new payment methods. <p><i>See Recommendation 2.</i></p>
Goal No. 5 Ensure rational, efficient, and effective use of public funds for GME in order to maximize the value of this public investment.	<ol style="list-style-type: none">1. Use a portion of current Medicare GME funds to fund the new infrastructure, developmental activities, new training slots (where needed), and program evaluation. <p><i>See Recommendations 1, 2, 3, and 4.</i></p>
Goal No. 6 Mitigate unwanted and unintended negative effects of planned transitions in GME funding methods.	<ol style="list-style-type: none">1. The GME Policy Council should develop a strategic plan—in consultation with the CMS GME Center and GME stakeholders—that allows for a careful phase-in of the reforms.2. The Council should ensure that its blueprint for the transition includes a rigorous strategy for evaluating its impact and making adjustments as needed. <p><i>See Recommendation 2</i></p>

Accessed on 04/14/2015: http://www.nap.edu/openbook.php?record_id=18754&page=144

Appendix B: Relevant AMA policy

D-305.967 The Preservation, Stability and Expansion of Full Funding for Graduate Medical Education

1. Our AMA will actively collaborate with appropriate stakeholder organizations, (including Association of American Medical Colleges, American Hospital Association, state medical societies, medical specialty societies/associations) to advocate for the preservation, stability and expansion of full funding for the direct and indirect costs of graduate medical education (GME) positions from all existing sources (e.g. Medicare, Medicaid, Veterans Administration, CDC and others).
2. Our AMA will actively advocate for the stable provision of matching federal funds for state Medicaid programs that fund GME positions.
3. Our AMA will actively seek congressional action to remove the caps on Medicare funding of GME positions for resident physicians that were imposed by the Balanced Budget Amendment of 1997 (BBA-1997).
4. Our AMA will strenuously advocate for increasing the number of GME positions to address the future physician workforce needs of the nation.
5. Our AMA will oppose efforts to move federal funding of GME positions to the annual appropriations process that is subject to instability and uncertainty.
6. Our AMA will oppose regulatory and legislative efforts that reduce funding for GME from the full scope of resident educational activities that are designated by residency programs for accreditation and the board certification of their graduates (e.g. didactic teaching, community service, off-site ambulatory rotations, etc.).
7. Our AMA will actively explore additional sources of GME funding and their potential impact on the quality of residency training and on patient care.
8. Our AMA will vigorously advocate for the contribution by all payers for health care, (including the federal government, the states and private payers), to funding both the direct and indirect costs of GME.
9. Our AMA will work, in collaboration with other stakeholders, to improve the awareness of the general public that GME is a public good that provides essential services as part of the training process and serves as a necessary component of physician preparation to provide patient care that is safe, effective and of high quality.

10. Our AMA staff and governance will continuously monitor federal, state and private proposals for health care reform for their potential impact on the preservation, stability and expansion of full funding for the direct and indirect costs of GME.
11. Our AMA: (A) recognizes that funding for and distribution of positions for GME are in crisis in the United States and that meaningful and comprehensive reform is urgently needed; (B) will immediately work with Congress to expand medical residencies in a balanced fashion based on expected specialty needs throughout our nation to produce a geographically distributed and appropriately sized physician workforce; and to make increasing support and funding for GME programs and residencies a top priority of the AMA in its national political agenda; and (C) will continue to work closely with the Accreditation Council for Graduate Medical Education, Association of American Medical Colleges, American Osteopathic Association, and other key stakeholders to raise awareness among policymakers and the public about the importance of expanded GME funding to meet the nation's current and anticipated medical workforce needs.
12. Our AMA will collaborate with other organizations to explore evidence-based approaches to quality and accountability in residency education to support enhanced funding of GME.
13. Our AMA will continue to strongly advocate that Congress fund additional graduate medical education (GME) positions for the most critical workforce needs, especially considering the current and worsening maldistribution of physicians.
14. Our AMA will advocate that the Centers for Medicare & Medicaid Services allow for rural and other underserved rotations in Accreditation Council for Graduate Medical Education (ACGME)-accredited residency programs, in disciplines of particular local/regional need, to occur in the offices of physicians who meet the qualifications for adjunct faculty of the residency program's sponsoring institution.
15. Our AMA encourages the ACGME to reduce barriers to rural and other underserved community experiences for graduate medical education programs that choose to provide such training, by adjusting as needed its program requirements, such as continuity requirements or limitations on time spent away from the primary residency site.

16. Our AMA encourages the ACGME and the American Osteopathic Association (AOA) to continue to develop and disseminate innovative methods of training physicians efficiently that foster the skills and inclinations to practice in a health care system that rewards team-based care and social accountability.
17. Our AMA will work with interested state and national medical specialty societies and other appropriate stakeholders to share and support legislation to increase GME funding, enabling a state to accomplish one or more of the following: (A) train more physicians to meet state and regional workforce needs; (B) train physicians who will practice in physician shortage/underserved areas; or (C) train physicians in undersupplied specialties and subspecialties in the state/region.
18. Our AMA supports the ongoing efforts by states to identify and address changing physician workforce needs within the GME landscape and continue to broadly advocate for innovative pilot programs that will increase the number of positions and create enhanced accountability of GME programs for quality outcomes.
19. Our AMA will continue to work with stakeholders such as Association of American Medical Colleges (AAMC), ACGME, AOA, American Academy of Family Physicians, American College of Physicians, and other specialty organizations to analyze the changing landscape of future physician workforce needs as well as the number and variety of GME positions necessary to provide that workforce.
20. Our AMA will explore innovative funding models for incremental increases in funded residency positions related to quality of resident education and provision of patient care as evaluated by appropriate medical education organizations such as the Accreditation Council for Graduate Medical Education. (Sub. Res. 314, A-07; Reaffirmation I-07; Reaffirmed: CME Rep. 4, I-08; Reaffirmed: Sub. Res. 314, A-09; Reaffirmed: CME Rep. 3, I-09; Reaffirmation A-11; Appended: Res. 910, I-11; Reaffirmed in lieu of Res. 303, A-12; Reaffirmed in lieu of Res. 324, A-12; Reaffirmation: I-12; Reaffirmation A-13; Appended: Res. 320, A-13; Appended: CME Rep. 5, A-13; Appended: CME Rep. 7, A-14; Appended: Res. 304, A-14)

D-305.992 Accounting for GME Funding

Our AMA will encourage: (1) department chairs and residency program directors to learn effective use of the information that is currently available on Medicare funding accounting of GME at the level of individual hospitals to assure appropriate support for their training programs, and publicize sources for this information, including placing links on our AMA web site; and (2) hospital administrators to share

with residency program directors and department chairs, accounting and budgeting information on the disbursement of Medicare education funding within the hospital to ensure the appropriate use of those funds for Graduate Medical Education. (Sub. Res. 302, I-00; Reaffirmed: CME Rep. 2, A-10; Reaffirmation A-11)

H-305.929 Proposed Revisions to AMA Policy on the Financing of Medical Education Programs

It is AMA policy that:

- (1) Since quality medical education directly benefits the American people, there should be public support for medical schools and graduate medical education programs and for the teaching institutions in which medical education occurs. Such support is required to ensure that there is a continuing supply of well-educated, competent physicians to care for the American public.
- (2) Planning to modify health system organization or financing should include consideration of the effects on medical education, with the goal of preserving and enhancing the quality of medical education and the quality of and access to care in teaching institutions are preserved.
- (3) Adequate and stable funding should be available to support quality undergraduate and graduate medical education programs. Our AMA and the federation should advocate for medical education funding.
- (4) Diversified sources of funding should be available to support medical schools' multiple missions, including education, research, and clinical service. Reliance on any particular revenue source should not jeopardize the balance among a medical school's missions.
- (5) All payers for health care, including the federal government, the states, and private payers, benefit from graduate medical education and should directly contribute to its funding.
- (6) Full Medicare direct medical education funding should be available for the number of years required for initial board certification. For combined residency programs, funding should be available for the longest of the individual programs plus one additional year. There should be opportunities to extend the period of full funding for specialties or subspecialties where there is a documented need, including a physician shortage.
- (7) Medical schools should develop systems to explicitly document and reimburse faculty teaching activity, so as to facilitate faculty participation in medical student and resident physician education and training.

(8) Funding for graduate medical education should support the training of resident physicians in both hospital and non-hospital (ambulatory) settings. Federal and state funding formulas must take into account the resources, including volunteer faculty time and practice expenses, needed for training residents in all specialties in non-hospital, ambulatory settings. Funding for GME should be allocated to the sites where teaching occurs.

(9) New funding should be available to support increases in the number of medical school and residency training positions, preferably in or adjacent to physician shortage/underserved areas and in undersupplied specialties. (CME Rep. 7, A-05; Reaffirmation I-06; Reaffirmed: Sub. Res. 314, A-07; Reaffirmation I-07; Reaffirmed: CME Rep. 4, I-08; Reaffirmed: Sub. Res. 314, A-09; Reaffirmed: CME Rep. 3, I-09; Reaffirmed: CME Rep. 15, A-10; Reaffirmation A-11; Reaffirmation A-13; Reaffirmed: CME Rep. 5, A-13)

H-310.929 Principles for Graduate Medical Education

Our AMA urges the Accreditation Council for Graduate Medical Education to incorporate these principles in the revised "Institutional Requirements" of the Essentials of Accredited Residencies of Graduate Medical Education, if they are not already present.

(1) PURPOSE OF GRADUATE MEDICAL EDUCATION. There must be objectives for residency education in each specialty that promote the development of the knowledge, skills, attitudes, and behavior necessary to become a competent practitioner in a recognized medical specialty.

(2) RELATION OF ACCREDITATION TO THE PURPOSE OF RESIDENCY TRAINING. Accreditation requirements should relate to the stated purpose of a residency program and to the knowledge, skills, attitudes, and behaviors that a resident physician should have on completing residency education.

(3) EDUCATION IN THE BROAD FIELD OF MEDICINE. GME should provide a resident physician with broad clinical experiences that address the general competencies and professionalism expected of all physicians, adding depth as well as breadth to the competencies introduced in medical school.

(4) SCHOLARLY ACTIVITIES FOR RESIDENTS. Graduate medical education should always occur in a milieu that includes scholarship. Resident physicians should learn to appreciate the importance of scholarly activities and should be knowledgeable about scientific method. However, the accreditation requirements, the structure, and the content of graduate medical education should be directed toward preparing physicians to practice in a medical specialty. Individual educational opportunities beyond the residency

program should be provided for resident physicians who have an interest in, and show an aptitude for, academic and research pursuits. The continued development of evidence-based medicine in the graduate medical education curriculum reinforces the integrity of the scientific method in the everyday practice of clinical medicine.

(5) FACULTY SCHOLARSHIP. All residency faculty members must engage in scholarly activities and/or scientific inquiry. Suitable examples of this work must not be limited to basic biomedical research. Faculty can comply with this principle through participation in scholarly meetings, journal club, lectures, and similar academic pursuits.

(6) INSTITUTIONAL RESPONSIBILITY FOR PROGRAMS. Specialty-specific GME must operate under a system of institutional governance responsible for the development and implementation of policies regarding the following; the initial authorization of programs, the appointment of program directors, compliance with the Essentials for Accredited Residencies in Graduate Medical Education, the advancement of resident physicians, the disciplining of resident physicians when this is appropriate, the maintenance of permanent records, and the credentialing of resident physicians who successfully complete the program. If an institution closes or has to reduce the size of a residency program, the institution must inform the residents as soon as possible. Institutions must make every effort to allow residents already in the program to complete their education in the affected program. When this is not possible, institutions must assist residents to enroll in another program in which they can continue their education. Programs must also make arrangements, when necessary, for the disposition of program files so that future confirmation of the completion of residency education is possible. Institutions should allow residents to form housestaff organizations, or similar organizations, to address patient care and resident work environment concerns. Institutional committees should include resident members.

(7) COMPENSATION OF RESIDENT PHYSICIANS. All residents should be compensated. Residents should receive fringe benefits, including, but not limited to, health, disability, and professional liability insurance and parental leave and should have access to other benefits offered by the institution. Residents must be informed of employment policies and fringe benefits, and their access to them. Restrictive covenants must not be required of residents or applicants for residency education.

(8) LENGTH OF TRAINING. The usual duration of an accredited residency in a specialty should be defined in the "Program Requirements." The required minimum duration should be the same for all programs in a specialty and should be sufficient to meet the stated objectives of

residency education for the specialty and to cover the course content specified in the Program Requirements. The time required for an individual resident physician's education might be modified depending on the aptitude of the resident physician and the availability of required clinical experiences.

(9) PROVISION OF FORMAL EDUCATIONAL EXPERIENCES. Graduate medical education must include a formal educational component in addition to supervised clinical experience. This component should assist resident physicians in acquiring the knowledge and skill base required for practice in the specialty. The assignment of clinical responsibility to resident physicians must permit time for study of the basic sciences and clinical pathophysiology related to the specialty.

(10) INNOVATION OF GRADUATE MEDICAL EDUCATION. The requirements for accreditation of residency training should encourage educational innovation and continual improvement. New topic areas such as continuous quality improvement (CQI), outcome management, informatics and information systems, and population-based medicine should be included as appropriate to the specialty.

(11) THE ENVIRONMENT OF GRADUATE MEDICAL EDUCATION. Sponsoring organizations and other GME programs must create an environment that is conducive to learning. There must be an appropriate balance between education and service. Resident physicians must be treated as colleagues.

(12) SUPERVISION OF RESIDENT PHYSICIANS. Program directors must supervise the clinical performance of resident physicians. The policies of the sponsoring institution, as enforced by the program director, must ensure that the clinical activities of each resident physician are supervised to a degree that reflects the ability of the resident physician. Integral to resident supervision is the necessity for frequent evaluation of residents by faculty, with discussion between faculty and resident. It is a cardinal principle that responsibility for the treatment of each patient and the education of resident and fellow physicians lies with the physician/faculty to whom the patient is assigned and who supervises all care rendered to the patient by residents and fellows.

(13) EVALUATION OF RESIDENTS AND SPECIALTY BOARD CERTIFICATION. Residency program directors and faculty are responsible for evaluating and documenting the continuing development and competency of residents, as well as the readiness of residents to enter independent clinical practice upon completion of training. Program directors should also document any deficiency or concern that could interfere with the practice of medicine and which requires remediation, treatment, or removal from training. Inherent within

the concept of specialty board certification is the necessity for the residency program to attest and affirm to the competence of the residents completing their training program and being recommended to the specialty board as candidates for examination. This attestation of competency should be accepted by specialty boards as fulfilling the educational and training requirements allowing candidates to sit for the certifying examination of each member board of the ABMS.

(14) GRADUATE MEDICAL EDUCATION IN THE AMBULATORY SETTING. Graduate medical education programs must provide educational experiences to residents in the broadest possible range of educational sites, so that residents are trained in the same types of sites in which they may practice after completing GME. It should include experiences in a variety of ambulatory settings, in addition to the traditional inpatient experience. The amount and types of ambulatory training is a function of the given specialty.

(15) VERIFICATION OF RESIDENT PHYSICIAN EXPERIENCE. The program director must document a resident physician's specific experiences and demonstrated knowledge, skills, attitudes, and behavior, and a record must be maintained within the institution. (CME Rep. 9, A-99; Reaffirmed: CME Rep. 2, A-09; Reaffirmed: CME Rep. 14, A-09)

D-305.973 Proposed Revisions to AMA Policy on the Financing of Medical Education Programs

Our AMA will work with:

- (1) the federal government, including the Centers for Medicare and Medicaid Services, and the states, along with other interested parties, to bring about the following outcomes:
 - (a) ensure adequate Medicaid and Medicare funding for graduate medical education;
 - (b) ensure adequate Disproportionate Share Hospital funding;
 - (c) make the Medicare direct medical education per-resident cost figure more equitable across teaching hospitals while assuring adequate funding of all residency positions;
 - (d) revise the Medicare and Medicaid funding formulas for graduate medical education to recognize the resources utilized for training in non-hospital settings;
 - (e) stabilize funding for pediatric residency training in children's hospitals;
 - (f) explore the possibility of extending full direct medical education per-resident payment beyond the time of

- first board eligibility for specialties/subspecialties in shortage/defined need;
- (g) identify funding sources to increase the number of graduate medical education positions, especially in or adjacent to physician shortage/underserved areas and in undersupplied specialties; and
- (h) act on existing policy by seeking federal legislation requiring all health insurers to support graduate medical education through an all-payer trust fund created for this purpose; and
- (2) other interested parties to ensure adequate funding to support medical school educational programs, including creating mechanisms to fund additional medical school positions. (CME Rep. 7, A-05; Reaffirmation I-06; Reaffirmation I-07; Reaffirmed: Res. 921, I-12; Reaffirmation A-13; Reaffirmed: CME Rep. 5, A-13)

H-310.916 Funding to Support Training of the Health Care Workforce

Our American Medical Association will insist that any new GME funding to support graduate medical education positions be available only to Accreditation Council for Graduate Medical Education (ACGME) and/or American Osteopathic Association (AOA) accredited residency programs, and believes that funding made available to support the training of health care providers not be made at the expense of ACGME and/or AOA accredited residency programs. (Sub. Res. 913, I-09)

H-200.955 Revisions to AMA Policy on the Physician Workforce

It is AMA policy that: (1) any workforce planning efforts, done by the AMA or others, should utilize data on all aspects of the health care system, including projected demographics of both providers and patients, the number and roles of other health professionals in providing care, and practice environment changes. Planning should have as a goal appropriate physician numbers, specialty mix, and geographic distribution.

(2) Our AMA encourages and collaborates in the collection of the data needed for workforce planning and in the conduct of national and regional research on physician supply and distribution. The AMA will independently and in collaboration with state and specialty societies, national medical organizations, and other public and private sector groups, compile and disseminate the results of the research.

(3) The medical profession must be integrally involved in any workforce planning efforts sponsored by federal or state governments, or by the private sector.

- (4) In order to enhance access to care, our AMA collaborates with the public and private sectors to ensure an adequate supply of physicians in all specialties and to develop strategies to mitigate the current geographic maldistribution of physicians.
- (5) There is a need to enhance underrepresented minority representation in medical schools and in the physician workforce, as a means to ultimately improve access to care for minority and underserved groups.
- (6) There should be no decrease in the number of funded graduate medical education (GME) positions. Any increase in the number of funded GME positions, overall or in a given specialty, and in the number of US medical students should be based on a demonstrated regional or national need.
- (7) Our AMA will collect and disseminate information on market demands and workforce needs, so as to assist medical students and resident physicians in selecting a specialty and choosing a career. (CME Rep. 2, I-03; Reaffirmation I-06; Reaffirmation I-07; Reaffirmed: CME Rep. 15, A-10; Reaffirmation: I-12; Reaffirmation A-13)

H-310.943 Closing of Residency Programs

The AMA: (1) encourages the Accreditation Council for Graduate Medical Education (ACGME) to address the problem of non-educational closing or downsizing of residency training programs; (2) encourages the ACGME to develop guidelines for the institution to follow in such closings or reductions that provide for adequate notification and out-placement service (such as resource contacts, transfer assistance, and financial assistance); (3) reminds all institutions involved in educating residents of their contractual responsibilities to the resident; (4) encourages the ACGME and the various Residency Review Committees to reexamine requirements for "years of continuous training" to determine the need for implementing waivers to accommodate residents affected by non-educational closure or downsizing; (5) urges residency programs and teaching hospitals be monitored by the applicable Residency Review Committees to ensure that decreases in resident numbers do not place undue stress on remaining residents by affecting work hours or working conditions, as specified in Residency Review Committee requirements; (6) urges institutions that initiate significant reductions in graduate medical education programs (in excess of 20 percent of the trainee complement or in excess of 10 percent of trainees for a given year), or that voluntarily close programs, be requested prior to or at the time of the reduction to file a concise summary of its educational impact with the Accreditation Council for Graduate Medical Education or the relevant Residency Review Committees; and (7) opposes the closure of residency/fellowship programs or reductions in the number of current positions in programs as a result of changes in GME funding. (Sub. Res.

328, A-94; Appended by CME Rep. 11, A-98; Reaffirmed: CME Rep. 7, A-06; Appended: Res. 926, I-12)

D-305.998 Impact of the Balanced Budget Act of 1997 on Graduate Medical Education Funding in Non-Hospital Settings

Our AMA will continue to advocate for additional funds from the federal government and other third party payers for GME programs that take place in non-hospital settings. (BOT Rep. 5, I-98; Reaffirmed: CME Report 2, A-08)

D-305.958 Increasing Graduate Medical Education Positions as a Component to any Federal Health Care Reform Policy

1. Our AMA will ensure that actions to bolster the physician workforce must be part of any comprehensive federal health care reform.

2. Our AMA will work with the Centers for Medicare and Medicaid Services to explore ways to increase graduate medical education slots to accommodate the need for more physicians in the US.

3. Our AMA will work actively and in collaboration with the Association of American Medical Colleges and other interested stakeholders to rescind funding caps for GME imposed by the Balanced Budget Act of 1997.

4. Our AMA will actively advocate for expanded funding for entry and continued training positions in specialties and geographic regions with documented medical workforce shortages.

5. Our AMA will lobby Congress to find ways to increase graduate medical education funding to accommodate the projected need for more physicians.

6. Our AMA will work with key organizations, such as the US Health Resources and Services Administration, the Robert Graham Center, and the Cecil G. Sheps Center for Health Services Research, to: (A) support development of reports on the economic multiplier effect of each residency slot by geographic region and specialty; and (B) investigate the impact of GME funding on each state and its impact on that state's health care workforce and health outcomes. (Sub. Res. 314, A-09; Appended: Res. 316, A-12; Reaffirmed: Res. 921, I-12; Reaffirmation A-13; Reaffirmed: CME Rep. 5, A-13)

H-310.912 Residents and Fellows' Bill of Rights

1. Our AMA continues to advocate for improvements in the ACGME Institutional and Common Program Requirements that support AMA policies as follows: a) adequate financial support for and guaranteed leave to attend professional meetings; b) submission of training verification information to requesting agencies within 30 days of the request; c)

adequate compensation with consideration to local cost-of-living factors and years of training, and to include the orientation period; d) health insurance benefits to include dental and vision services; e) paid leave for all purposes (family, educational, vacation, sick) to be no less than six weeks per year; and f) stronger due process guidelines.

2. Our AMA encourages the ACGME to ensure access to educational programs and curricula as necessary to facilitate a deeper understanding by resident physicians of the US health care system and to increase their communication skills.
3. Our AMA regularly communicates to residency and fellowship programs and other GME stakeholders through various publication methods (e.g., the AMA GME e-letter) this Residents and Fellows' Bill of Rights.
4. Our AMA: a) will promote residency and fellowship training programs to evaluate their own institution's process for repayment and develop a leaner approach. This includes disbursement of funds by direct deposit as opposed to a paper check and an online system of applying for funds; b) encourages a system of expedited repayment for purchases of \$200 or less (or an equivalent institutional threshold), for example through payment directly from their residency and fellowship programs (in contrast to following traditional workflow for reimbursement); and c) encourages training programs to develop a budget and strategy for planned expenses versus unplanned expenses, where planned expenses should be estimated using historical data, and should include trainee reimbursements for items such as educational materials, attendance at conferences, and entertaining applicants.

Payment in advance or within one month of document submission is strongly recommended.

5. Our AMA adopts the following "Residents and Fellows' Bill of Rights" as applicable to all resident and fellow physicians in ACGME-accredited training programs:

RESIDENTS AND FELLOWS' BILL OF RIGHTS

Residents and fellows have a right to:

- A. An education that fosters professional development, takes priority over service, and leads to independent practice.

With regard to education, residents and fellows should expect: (1) A graduate medical education experience that facilitates their professional and ethical development, to include regularly scheduled didactics for which they are released from clinical duties. Service obligations should not interfere with educational opportunities and clinical education should be given priority over service obligations; (2) Faculty who devote sufficient time to the educational

program to fulfill their teaching and supervisory responsibilities; (3) Adequate clerical and clinical support services that minimize the extraneous, time-consuming work that draws attention from patient care issues and offers no educational value; (4) 24-hour per day access to information resources to educate themselves further about appropriate patient care; and (5) Resources that will allow them to pursue scholarly activities to include financial support and education leave to attend professional meetings.

B. Appropriate supervision by qualified faculty with progressive resident responsibility toward independent practice.

With regard to supervision, residents and fellows should expect supervision by physicians and non-physicians who are adequately qualified and which allows them to assume progressive responsibility appropriate to their level of education, competence, and experience.

C. Regular and timely feedback and evaluation based on valid assessments of resident performance.

With regard to evaluation and assessment processes, residents and fellows should expect: (1) Timely and substantive evaluations during each rotation in which their competence is objectively assessed by faculty who have directly supervised their work; (2) To evaluate the faculty and the program confidentially and in writing at least once annually and expect that the training program will address deficiencies revealed by these evaluations in a timely fashion; (3) Access to their training file and to be made aware of the contents of their file on an annual basis; and (4) Training programs to complete primary verification/credentialing forms and recredentialing forms, apply all required signatures to the forms, and then have the forms permanently secured in their educational files at the completion of training or a period of training and, when requested by any organization involved in credentialing process, ensure the submission of those documents to the requesting organization within thirty days of the request.

D. A safe and supportive workplace with appropriate facilities.

With regard to the workplace, residents and fellows should have access to: (1) A safe workplace that enables them to fulfill their clinical duties and educational obligations; (2) Secure, clean, and comfortable on-call rooms and parking facilities which are secure and well-lit; (3) Opportunities to participate on committees whose actions may affect their education, patient care, workplace, or contract.

E. Adequate compensation and benefits that provide for resident well-being and health.

(1) With regard to contracts, residents and fellows should receive: a. Information about the interviewing residency or fellowship program including a copy of the currently used contract clearly outlining the conditions for (re)appointment, details of remuneration, specific responsibilities including call obligations, and a detailed protocol for handling any grievance; and b. At least four months advance notice of contract non-renewal and the reason for non-renewal.

(2) With regard to compensation, residents and fellows should receive: a. Compensation for time at orientation; and b. Salaries commensurate with their level of training and experience, and that reflect cost of living differences based on geographical differences.

(3) With Regard to Benefits, Residents and Fellows Should Receive: a. Quality and affordable comprehensive medical, mental health, dental, and vision care; b. Education on the signs of excessive fatigue, clinical depression, and substance abuse and dependence; c. Confidential access to mental health and substance abuse services; d. A guaranteed, predetermined amount of paid vacation leave, sick leave, maternity and paternity leave and educational leave during each year in their training program the total amount of which should not be less than six weeks; and e. Leave in compliance with the Family and Medical Leave Act.

F. Duty hours that protect patient safety and facilitate resident well-being and education.

With regard to duty hours, residents and fellows should experience: (1) A reasonable work schedule that is in compliance with duty-hour requirements set forth by the ACGME or other relevant accrediting body; and (2) At-home call that is not so frequent or demanding such that rest periods are significantly diminished or that duty-hour requirements are effectively circumvented.

G. Due process in cases of allegations of misconduct or poor performance.

With regard to the complaints and appeals process, residents and fellows should have the opportunity to defend themselves against any allegations presented against them by a patient, health professional, or training program in accordance with the due process guidelines established by the AMA.

H. Access to and protection by institutional and accreditation authorities when reporting violations.

With regard to reporting violations to the ACGME, residents and fellows should: (1) Be informed by their program at the beginning of their training and again at each semi-annual review of the resources and processes available within the

residency program for addressing resident concerns or complaints, including the program director, Residency Training Committee, and the designated institutional official; (2) Be able to file a formal complaint with the ACGME to address program violations of residency training requirements without fear of recrimination and with the guarantee of due process; and (3) Have the opportunity to address their concerns about the training program through confidential channels, including the ACGME concern process and/or the annual ACGME Resident Survey. (CME Rep. 8, A-11; Appended: Res. 303, A-14)

Res 324-A-14: USE OF UNMATCHED MEDICAL STUDENTS AS "ASSISTANT PHYSICIANS"

Introduced by Young Physicians Section

HOUSE ACTION: ADOPTED

See Policy H-160.949.

RESOLVED, That our American Medical Association oppose special licensing pathways for physicians who are not currently enrolled in an Accreditation Council for Graduate Medical Education of American Osteopathic Association training program, or have not completed at least one year of accredited post-graduate US medical education.

Appendix C: The WWAMI

As stated in the body of this report, regional medical education is a concept catching on in states working to not only increase the number of medical students and residents in the state, but also use physician training to expand access to care in rural and underserved areas. In the early 1970s, the University of Washington took on a bold challenge to train and prepare physicians to care for patients and communities throughout the states of Washington, Alaska, Montana and Idaho (Wyoming joined in 1996). Today, this regional medical education program known as WWAMI (an acronym representing the states it serves) is heralded as one of the most innovative medical education and training programs in the country.

The program has five primary goals:

1. Provide publicly supported medical education;
2. Increase the number of primary-care physicians;
3. Provide community-based medical education;
4. Expand graduate medical education (residency training) and continuing medical education; and
5. Provide all of this in a cost-effective manner.

Under this regional medical education model, each participating state partners with the UW School of Medicine

(UWSOM) to educate a fixed number of medical students from and for their state. Each year, approximately 65 third-year medical students choose WWAMI sites for a portion or all of their basic medicine clerkship. In addition, about 35 fourth-year students travel each year to WWAMI sites for advanced primary care clerkships.

For the first year of medical school, students study at their home state university (University of Washington, University of Wyoming, University of Alaska-Anchorage, Montana State University, or University of Idaho). Second year students from home state universities then come to the UWSOM in Seattle or Spokane for their entire second year. During the third and fourth years of medical school, students complete clinical rotations in a variety of sites and environments within the five-state region to learn and experience very different facets of medicine. For example, one month might be spent in a remote community near Nome, Alaska, another in a migrant community near Yakima, WA, and another in a Level I trauma center in Seattle. The goal is to provide a rich array of clinical experiences in a variety of settings, mentored by community-based clinical faculty who volunteer their time to educate the physicians in training.

Medical residents also participate in the WWAMI program. The Department of Medicine sponsors Boise Internal Medicine with eight categorical residents per year, and another 20 travel to WWAMI sites for elective block rotations. In addition to Boise, these include Wenatchee and Toppenish, Washington; Billings, Missoula, Dillon, Livingston, and Sidney, Montana; and Soldotna, Alaska. Residents work in a number of settings in these communities, from solo practitioner offices to large clinics and hospitals. The rural rotations are highly rated and always in demand.

The WWAMI program has resulted in a majority of the students training in the program choosing to remain and practice medicine within the five-state region, with over half choosing careers in primary care, helping to stem the shortage of primary care physicians, especially in rural areas.

A variety of programs are available in communities throughout the five-state region that provide not only an educational experience for medical students, but also supports community efforts through volunteerism, effectively serving the community through regional medical education.

These include:

- WWAMI Rural Integrated Training Experience (WRITE): A six-month experience in a rural setting in which students complete clinical training working closely with community preceptors (clinical instructors).

- Rural/Underserved Opportunities Program (R/UOP): 4-week preceptorships (mentorships) available with practicing physicians in rural and urban underserved communities held over the summer between a student's first and second year.
- Targeted Rural Underserved Track (TRUST): Longitudinal experience with a single rural community over a student's entire medical school career, including completing both WRITE and R/UOP and returning regularly to learn about and work in the community.

WWAMI-participating schools of medicine are central to a network of programs designed to alleviate the shortages of healthcare programs in rural and underserved urban areas.

These programs include:

- Area Health Education Center Network (AHEC): A program that works to improve the diversity, distribution, and quality of the health workforce in the WWAMI region, partnering with communities to promote health career pathways, create educational opportunities for students from junior high school through professional and post-graduate training, and support healthcare providers caring for underserved populations.
- The WWAMI Center for Health Workforce Studies conducts studies in the WWAMI region that can inform policy and advance workforce needs to address state health care workforce issues.
- The WWAMI Rural Health Research Center focuses on policy affecting rural and underserved areas.

Also recently, the Western Interstate Commission for Higher Education (WICHE) approved eleven states (Alaska, Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, South Dakota, Washington and Wyoming) to join the WICHE State Authorization Reciprocity Agreement (W-SARA). This new initiative of states will make distance education courses more accessible to students across state lines and make it easier for states to regulate and institutions to participate in interstate distance education. This group's activities are being followed by the AMA.

Appendix D: State initiatives (majority taken from COGME's A-14 report)

California: Most recently, California passed SB 22 which "establishes a Graduate Medical Education Trust Fund that can receive contributions from private sources in order to provide grants to residency programs in areas with the greatest need. This bill is intended to serve as a vehicle for discussion among various health care stakeholders (physicians, provider groups, hospitals, clinics and health plans)

about how to adequately and sustainably fund graduate medical education in light of inadequate funding levels from the federal government."⁴¹

In 2014, the California legislature approved and the governor signed a state budget that includes \$7 million for new primary care residency slots. Three million dollars is being applied to expand the Song-Brown program to all primary care specialties (family medicine, internal medicine, obstetrics-gynecology and pediatrics). The additional \$4 million will fund residency programs that wish to expand and train more residents. The budget act requires priority be given to programs that have graduates of California-based medical schools, reflecting data suggesting that physicians who obtain their medical degree and complete training in a state are very likely to practice in that same state.

In 2013 the state legislature introduced AB 1176, "Primary Care Access: Residency Programs," that proposed a \$5 per covered life fee for health insurers to fund GME. Besides creating a body to distribute GME funding to new and existing programs, eligibility for funds is based on a program's location in an underserved area; record of placing graduates in underserved areas; training in primary care; or undersupplied specialties in the local community. The bill did not become law.

Florida: State and private funding options have been pursued, and various models have been used for GME funding. In 2013, the state legislature used \$20.6 million in state funds, coupled with \$52 million in existing funds, to provide \$80 million in supplemental funding for a Statewide Medicaid Residency Program (Senate Bill [S.B.] 1520). For this program, GME funds related to Medicaid are removed from regular hospital reimbursement payments and will instead be subject to a formula-based distribution. Each hospital participating in the program will receive an annual allocation determined by a calculation of the hospital's percentage of total residents statewide and the hospital's percentage of total Medicaid inpatient reimbursement among participating hospitals. By definition, this program can only increase residency positions/programs in hospitals with existing programs. In 2010, S.B. 1256, "Physician Workforce," which passed committees in the State Senate, was to have funded the direct costs of innovative GME programs, among other physician workforce goals; the bill did not become law.

Georgia: Beginning in FY 2013, dollar-for-dollar funds are available from the state for hospitals to start residency programs. The goals of this funding stream include creating 400 new positions in hospitals that previously had no programs, ensuring some concentration in primary care specialties and general surgery, and developing residencies in geographically underserved parts of the state. Currently four hospitals are developing programs, with the potential

of creating upwards of 267 positions. Funding is only for the process of creating a program, thus covering accreditation costs, hiring staff, purchasing new equipment and so forth. Once a hospital has residents enrolled and is receiving Medicare funds, the state program ceases to support the hospital.

Hawaii: In 2013, the state legislature and governor approved a \$1.8 million appropriation for the Primary Care Training Program at Hilo Medical Center, which is supporting several disciplines, including four new family medicine residents a year for three years, beginning in 2015. The Hawaii legislature is currently considering a task force to study and make recommendations regarding the physician workforce in Hawaii, with specific focus on expansion to rural and medically underserved areas, and opportunities for foreign medical school graduates (H.C.R. 192 and H.R. 127)

Idaho: The state legislature recently funded a new family medicine program. In addition, the Family Medicine Residency of Idaho received from the Blue Cross Foundation of Idaho \$100,000 per year to support rural rotations for residents.

Indiana: H.B. 1232, passed in 2015, "Establishes the medical residency education fund for the purpose of expanding medical education in Indiana by funding new residency program slots at licensed hospitals. Specifies uses of money from the medical residency education fund and the graduate medical education fund. Establishes the graduate medical education board (board) in order to: (1) provide funding for residents not funded by the federal Centers for Medicare and Medicaid Services; (2) provide technical assistance for entities that wish to establish a residency program; (3) fund infrastructure costs for an expansion of graduate medical education; and (4) provide startup funding for entities that wish to establish a residency program. Provides that a recipient of a medical education residence grant or money from the graduate medical education fund must agree to provide matching funds equal to at least 25% of the money provided. Allows the board to require an entity receiving a grant for infrastructure expenses to financially participate in the expenses in an amount not to exceed 25% of the infrastructure expenses."⁴² New programs in Evansville and Gary, Indiana are seeking to make use of this new legislation.

Iowa: The state legislature is currently considering legislation (H.S.B. 83, H.F. 193, S.F. 274, S.S.B. 1096 and 1227) that would establish a medical residency training state matching grants program to provide matching state funding to sponsors of accredited GME residency programs to establish, expand, or support medical residency training programs. Funding for the program would be provided through the state's health care workforce shortage fund or the medical residency training account. Grants would be used to support the

establishment of new or alternative campus medical residency training programs, new residency positions within existing medical residency or fellowship training programs, or funding of new residency positions in excess of the federal residency cap.

Maryland: The state boasts an all-payer system to fund GME, the only one in the nation, which is managed through the Health Service Cost Review Commission (HSCRC). However, in recent years no additional funding has been requested explicitly for new programs or positions. The HSCRC has no role in influencing the number or specialty of residents in training.

Minnesota: Clinical training sites consisting of a variety of health professions are supported through the Medical Education and Research Costs program; these grants are provided through state and federal Medical Assistance funds and cigarette tax proceeds. The FY 2014-15 base budget is \$44.3 million. New in FY 2013 was a \$1 million per year grant program for family medicine residency programs outside the seven-county metropolitan area. To be eligible, programs must demonstrate that at least 25% of graduates practice in Minnesota communities outside the metropolitan area for the most recent three years.

The Minnesota legislature is currently considering a series of bills to promote the health care workforce. Two loan forgiveness bills (S.F. 3, and H.F. 211) look to add funding to loan forgiveness programs and increase the number of participants by 200 practitioners over four years, including 60 primary care physicians.

General workforce legislation would establish the Minnesota Health Care Workforce Council (H.F. 1447 and S.F. 1246), which would be tasked with preparing a comprehensive health care workforce plan every five years that includes: 1) providing ongoing policy and program monitoring and coordination; 2) providing health care workforce, trends, changes in health care delivery, practice, and financing; and 3) recommending appropriate public and private sector efforts to address identified workforce needs. The legislation also provides additional funding for residency programs in mental health and primary care, and provides grants to preceptors for medical students and residency training. In addition, the bills would establish a grant program to expand primary care residency training; a grant program to expand clinical training of advanced practice registered nurses, physician assistants, and mental health professionals; and a preceptor incentive grant program.

Montana: In 2013, the legislature added \$200,000 to the state's appropriation for GME, and also approved an additional \$240,000 to support rural rotations for residents.

New Jersey: The state legislature is considering A. 1930, a bill to increase the number of teaching hospitals and medical residency programs throughout the state. A separate bill (A.R. 94) urges Congress to increase the number of medical residency positions funded by the federal government.

North Carolina: The Blue Cross Blue Shield of North Carolina Foundation is providing partial funding to establish the University of North Carolina Family Medicine's Underserved Residency Track, which will train two residents per year for three years in underserved communities.

North Dakota: The Health Care Workforce Initiative, funded by state government, will allow the University of North Dakota School of Medicine and Health Sciences to expand with the expectation that by the 2017–2018 academic year, there will be 64 additional medical students (16 per year), 90 health sciences students (30 per year), and 51 residents (post-MD degree trainees, with 17 per year added). This initiative is expected to retain more of the graduates for practice in North Dakota.

In 2015, the state legislature considered H.B. 1396, a bill to provide student loan repayment programs for health care professionals who practice in underserved areas. The bill did not become law.

Oklahoma: In 2012, the state legislature allocated \$3 million to establish new primary care residency programs in underserved areas, administered by the Oklahoma State University College of Osteopathic Medicine or the University Of Oklahoma College Of Medicine, with the expectation that the programs become funded by Medicare.

Oregon: In 2015, the state legislature passed a bill that "Requires Oregon Health Policy Board to study and evaluate effectiveness of existing financial incentive programs offered in this state and address new types of programs to recruit and retain health care providers to practice in rural and medically underserved areas." It also specifically asks for recommendations regarding: "Loans, grants or other financial incentives to hospitals and teaching health centers for the purpose of establishing or expanding residency programs, including recommendations for the eligibility criteria, repayment provisions, interest rates and other requirements for financial incentives."⁴³

Tennessee: There is discussion of redirecting the professional privilege tax that licensed physicians pay towards expansion of GME funding. Replacement dollars need to be identified or a reduction in expenses would be required, as this tax adds approximately \$8 million to the general fund.

Texas: House Bill (H.B.) 2908, which was adopted in 2011, directed the Texas Higher Education Coordinating Board to conduct assessments of the state's GME system to accommodate the training needs of the state's medical school graduates. During 2013, the legislature appropriated \$16.3 million for grants to develop new GME programs, expand existing programs, and help fill existing unfilled GME positions. Funding of \$7.4 million goes to up to 25 first-year unfilled/unfunded GME slots and up to 63 new first-year positions at existing or new programs, at \$65,000 per year per resident, for one year. In addition, \$5 million goes to encourage development of new GME positions through community collaboration and innovative funding, for new positions created on or after January 1, 2014, or positions unfilled on January 1, 2013. Additional funding depends upon appropriation. The balance goes to planning grants and primary care innovation programs to encourage more students to enter primary care. Concerns revolve around funding beyond the first year.

Wisconsin: New funding for several new GME initiatives has recently been approved, including \$1.7 million to increase the Medical College of Wisconsin's (MCW) family medicine programs by 12 new positions, primarily in underserved areas of Milwaukee. The state has also made a start-up investment for MCW's planned new programs in northeastern and central Wisconsin. In addition, the Wisconsin Department of Health Services will be supporting 10 new residency slots in existing programs, targeting specialties in need (family medicine, general internal medicine, general surgery, pediatrics, and psychiatry) and in rural locations. Programs can apply for expansion of up to three positions (three in one year, or one in each of three years). Programs in bordering states are eligible if they have a substantial presence in Wisconsin (e.g., rotations in the state, graduates who practice in Wisconsin). The state is seeking matching Medicaid funds, which would allow for doubling the number of new positions. Finally, the state will assist rural hospitals or consortia of rural hospitals to develop new residency programs, with up to \$1.75 million available for three years, limited to the same specialties as above.

Appendix E: Comparison of assistant physician bills

	Missouri SB 716 (2014)	Arkansas HB 1162 (2015)	Oklahoma SB 712 (2015)	Kansas HB 2225 (2015)
Status	Signed into law in 2014.	Signed into law in 2015.	Bill failed to advance.	Signed into law
Title	Assistant Physician. Can use the terms "doctor," "Dr.," or "doc." Must wear ID badge.	Graduate Medical Physician. Can include MD on badge. Must wear ID badge.	"Assistant physician" Considered a "training license."	The special permit holder must clearly identify oneself to patients as a physician in training and may use the term "doctor" or "Dr."
Medical school	Medical school graduate	Same	Same	Graduate of the University of Kansas school of medicine
Citizenship	(1) Resident and citizen of US or (2) Legal resident alien	(1) Arkansas resident or (2) US citizen/alien	Same as MO	N/A – but must meet all qualifications of licensure except exams and postgraduate training.
Licensing exam	<p>Completed Step 1 and 2 of USMLE (or equivalent) within 2 year-period preceding application for licensure, but no more than 3 years after graduation from medical school</p> <p><i>If an applicant was serving in an ACGME- or AOA-accredited residency program, the 2-year time period does not apply.</i></p> <p><i>The Missouri Board of Medical Examiners (MBOME) has proposed requiring assistant physicians to pass the USMLE Step 3 or the Comprehensive Osteopathic Medical Examination (COMPLEX) on or before the 3-year anniversary of receiving his or her license. The license of any assistant physician who fails to meet this requirement would become void on the 3rd anniversary of the date the license was issued.</i></p> <p><i>The MBOME has proposed requiring physician supervisors to follow ACGME milestones for the relevant specialty area. This includes:</i></p> <ul style="list-style-type: none"> • <i>Direct supervision for the first 6 months of practice</i> • <i>For the next 6-12 months, spending at least two half-days a week directly supervising the assistant physician</i> • <i>After 1 year of practice, spending at least one half-day a week directly supervising the assistant physician.</i> <p><i>The MBOME's proposed regulation defines supervision as examining the patient examined by the assistant physician, and approving each plan of care developed by the assistant physician prior to implementation.</i></p>	<p>Completed Step 1 and 2 of USMLE (or equivalent) within 2 year-period preceding application for licensure, but no more than 2 years after graduation from medical school</p>	<p>Completed Step 1 and 2 of USMLE (or equivalent) within 2 year-period preceding application for licensure, but no more than 3 years after graduation from medical school</p> <p>OR has completed Step 2 of USMLE (or equivalent) unless when the 2-year anniversary occurred, he or she was a resident physician.</p>	N/A

Appendix E: Comparison of assistant physician bills (continued)

	Missouri SB 716 (2014)	Arkansas HB 1162 (2015)	Oklahoma SB 712 (2015)	Kansas HB 2225 (2015)
Timing	<p>AP must enter into collaborative practice agreement within 6 months of initial licensure. There cannot be more than a 6-month time period between collaborative practice agreements.</p> <p>The MBOME has proposed requiring assistant physicians to pass the USMLE Step 3 or the Comprehensive Osteopathic Medical Examination (COMPLEX) on or before the 3-year anniversary of receiving his or her license. The license of any assistant physician who fails to meet this requirement would become void on the 3rd anniversary of the date the license was issued.</p>	<p>AP must enter into collaborative practice agreement ("protocol") within 6 months of initial licensure.</p> <p>The medical board is tasked with determining the license renewal period.</p>	Not addressed	<p>Special permit expires on either:</p> <p>(1) the day the person holding the special permit becomes engaged in a full-time approved postgraduate training program or</p> <p>(2) one year from its date of issuance, whichever comes first.</p> <p>A special permit may not be renewed more than once.</p>
Residency status	Has not completed residency	Same	Same	Same
Scope of practice	<p>Limited to primary care services (family practice, general practice, internal medicine, pediatrics, obstetrics, or gynecology) in medically underserved urban or rural areas, or in pilot project areas.</p> <p>The MBOME has proposed the following:</p> <ul style="list-style-type: none"> <i>If the collaborating physicians and assistant physician are using telehealth to provide services in medically underserved areas, no mileage limitation applies.</i> <i>If telehealth is not being utilized, the collaborating physician must be no further than 50 miles from the assistant physician.</i> 	<p>GRP is a dependent medical practitioner who (i) only provides health-care services under the supervision of a physician and (ii) works under physician-drafted protocol approved by the state medical board.</p> <p>Supervision – overseeing the activities of and accepting responsibility for the GRP's medical services rendered.</p> <p>Physician – Licensed in Arkansas and board certified.</p> <p>Those duties and responsibilities, including the prescribing, ordering, and administering of drugs and medical devices, that are delegated by the supervising physician.</p> <p>Patient care orders have the same medical and legal effect as the supervising physician.</p>	Not addressed	Special permit holder may practice medicine and surgery.
Practice setting	Rural health clinic	Not addressed	Same as MO	Medically underserved areas
Geographic proximity	<p>AP must maintain geographic proximity with physician.</p> <p>Before practicing in a setting where the collaborating physician is not continuously present, the Assistant Physician must practice for at least one month with the collaborating physician continuously present.</p> <p>Rural health clinics can waive this requirement up to 28 days per calendar year.</p>	<p>Supervision must be continuous and require the physical presence of the supervising physician at the place that the services are rendered.</p> <p>A back-up physician can be identified.</p>	No supervision required other than that required by federal law for PAs.	On-site supervision required (physical present and immediately available).
Ratio of physician to AP/GRP	1:3 FTEs	1:2 GRPs	N/A	N/A

Appendix E: Comparison of assistant physician bills (continued)

	Missouri SB 716 (2014)	Arkansas HB 1162 (2015)	Oklahoma SB 712 (2015)	Kansas HB 2225 (2015)
Prescriptive authority	<p>Schedule III (limited to a 5-day supply without refill) – V, all legend drugs, and all nonscheduled prescription medications and medical devices.</p> <p>Collaborating physician delegates Rx authority.</p> <p>120 hours within a 4-month period of practice on-site with the collaborating physician required prior to prescribing controlled substances.</p> <p><i>The MBOME has proposed requiring assistant physicians with authority to prescribe controlled substances must complete a board-approved course in Controlled Substance Risk Evaluation and Mitigation Strategy (REMS) at least every 2 years.</i></p>	<p>Schedule III – V, all legend drugs, and all nonscheduled prescription medications and medical devices. Rx authority cannot exceed that of the supervising physician.</p>	N/A	Special permit holder can prescribe drugs, but not controlled substances.
Chart review	<p>Every 14 days, physician must review at least</p> <ul style="list-style-type: none"> • 10% of charts • 20% of charts in which controlled substances are prescribed 	N/A	N/A	N/A
Reimbursement	Considered a Physician Assistant for purposes of regulations of the Centers for Medicare and Medicaid Services (CMS).	N/A	Same as MO	The holder of a special permit shall not charge patients a fee for services rendered but may be compensated directly by the person under whose supervision and sponsorship the permit holder is practicing.
Liability	Collaborating physician accepts responsibility for primary care services rendered	<p>Supervising physician must be identified on all orders. The GRP is considered the agent of the supervising physician.</p> <p>A GRP shall be covered under the provisions regarding medical malpractice and legal liability as such applies to the supervising physician.</p>	N/A	Sponsor/supervising physician accepts responsibility for the services rendered by the special permit holder.
Other	<i>The MBOME has proposed requiring each Assistant Physician to complete 50 hours of continuing medical education every 2 years.</i>			

References

1. Institute of Medicine. 2014. Graduate Medical Education that Meets the Nation's Health Needs, p. 64. http://www.nap.edu/openbook.php?record_id=18754. Accessed 9/9/15
2. American Medical Association. Medical Student Section. Resolution A-15. Sustainable Graduate Medical Education Reform.
3. O'Shae, J. S. 2014. Reforming Graduate Medical Education in the U.S. The Heritage Foundation. <http://www.heritage.org/research/reports/2014/12/reforming-graduate-medical-education-in-the-us>. Accessed 4/10/15
4. Association of American Medical Colleges. 2014. More Students Going to Medical School Than Ever Before. <https://www.aamc.org/newsroom/newsreleases/411636/10282014.html>. Accessed 4/13/15.
5. Grover, A. 2015. Highlighting the Impact of Medicare GME on physician migration. Association of American Medical Colleges, p. 2. <https://www.aamc.org/download/423082/data/aamccommentshighlightimpactofmedicaregmcaponphysician-immigrati.pdf>. Accessed 4/9/15
6. Spero, J. C. et al. 2013. GME in the United States: A Review of State Initiatives, p. 18. The Cecil G. Sheps Center for Health Services Research. http://www.shepscenter.unc.edu/wp-content/uploads/2013/09/GMEstateReview_Sept2013.pdf. Accessed 4/10/15.
7. NRMP. 2015 NRMP Match Data. http://www.nrmp.org/wp-content/uploads/2015/03/ADT2015_final.pdf
8. Signer, M. M. 2015. 2015. Group on Student Affairs Regional Meetings. NRMP. <http://www.nrmp.org/wp-content/uploads/2015/05/Mona-GSA-presentation-2015-Final.pdf>. Accessed 9/3/15.
9. American Medical Association. Medical Student Section. Resolution A-15. Standardizing the Residency Match System and Timeline.
10. NRMP. 2015. All-In-Policy. <http://www.nrmp.org/policies/all-in-policy/>. Accessed 4/29/15.
11. Stein, L. 2012. HCA hospitals to add hundreds of medical residencies in Tampa Bay. Tampa Bay Times. <http://www.tampabay.com/news/health/hca-hospitals-to-add-hundreds-of-medical-residencies-in-tampa-bay/1261497>. Accessed 9/9/15.
12. Veterans Access, Choice and Accountability Act of 2014. U.S. Department of Veterans Affairs. <http://www.va.gov/opa/choiceact/documents/Choice-Act-Summary.pdf>. Accessed 4/23/15.
13. GME ENHANCEMENT: Veterans Access, Choice, and Accountability Act (VACA) of 2014. U.S. Department of Veterans Affairs. http://www.va.gov/ooa/docs/GME_Enhancement_VACA_PrgmAnncc_AY15-16.pdf. Accessed 4/10/15.
14. Sanders, K. Veterans Choice Act: Update on the VA GME Expansion June 26th, 2015. <http://astho.org/pcphcollaborative/workforce/slides-VA-GME-Expansion/>. Accessed 10/29/15.
15. H.R.2 - Medicare Access and CHIP Reauthorization Act of 2015. <https://www.congress.gov/bill/114th-congress/house-bill/2/text#toc-H35F960141BC64DA9909187E09EF-1C67B>. Accessed 4/10/15.
16. H.R.1117 - Creating Access to Residency Education Act of 2015. 114th Congress (2015-2016). <https://www.congress.gov/bill/114th-congress/house-bill/1117/text>. Accessed 9/7/15.
17. H.R.2124 - Resident Physician Shortage Reduction Act of 2015. 114th Congress (2015-2016). <https://www.congress.gov/bill/114th-congress/house-bill/2124/text?q=%7B%22search%22%3A%5B%22%5C%22hr2124%5C%22%22%5D%7D&resultIndex=1>. Accessed 9/7/15.
18. S.1148 - Resident Physician Shortage Reduction Act of 2015. 114th Congress (2015-2016). <https://www.congress.gov/bill/114th-congress/senate-bill/1148?q=%7B%22search%22%3A%5B%22%5C%22s1148%5C%22%22%5D%7D&resultIndex=1>. Accessed 9/7/15.
19. Wilensky, G. Expert Voices: The Outlook for Reforming Payments to Graduate Medical Education. 2015. Expert Voices. NIHCM Foundation. http://www.nihcm.org/images/pdf/Reforming_Payments_to_Graduate_Medical_Education.pdf
20. Council on Graduate Medical Education. 2014. The Role of Graduate Medical Education in the New Health Care Paradigm, 22nd Report, p. 14-16. <http://www.hrsa.gov/advisorycommittees/bhpradvisory/cogme/Reports/22report.pdf>. Accessed 4/13/15.
21. Grover, A. 2015. Highlighting the Impact of Medicare GME on physician migration. Association of American Medical Colleges, p. 6. <https://www.aamc.org/download/423082/data/aamccommentshighlightimpactofmedicaregmcaponphysician-immigrati.pdf>. accessed 4/9/15
22. Association of American Medical Colleges. 2015. Optimizing GME. <https://www.aamc.org/download/425468/data/optimizinggmeresport.pdf>. Accessed 4/10/15.
23. Association of American Medical Colleges. 2013. Training Tomorrow's Doctors Today (H.R. 1201). <https://www.aamc.org/download/355920/data/trainingtomorrowsdoctorstodayact.pdf>. Accessed 4/14/2015
24. American Academy of Family Physicians. 2014. Aligning Resources, Increasing Accountability, and Delivering a Primary Care Physician Workforce for America, p. 6. <http://www.aafp.org/dam/AAFP/documents/advocacy/workforce/gme/Full-GME-090914.pdf> Accessed 9/9/15.
25. O'Shea, J. S. 2014. Reforming Graduate Medical Education in the U.S. The Heritage Foundation. <http://www.heritage.org/research/reports/2014/12/reforming-graduate-medical-education-in-the-us>. Accessed 9/7/15.
26. Spero, J. C. et al. 2013. GME in the United States: A Review of State Initiatives, p. iii. The Cecil G. Sheps Center for Health Services Research. http://www.shepscenter.unc.edu/wp-content/uploads/2013/09/GMEstateReview_Sept2013.pdf. Accessed 4/10/15.
27. American Medical Association. The Council On Medical Education, Report 7 (A-14). Physician Workforce Shortage: Approaches to GME Financing. (Resolution 914-I-13).
28. Norris, T. E. 2006. Regional Solutions to the Physician Workforce Shortage: The WWAMI Experience. Academic Medicine. http://journals.lww.com/academicmedicine/Full-text/2006/10000/Regional_Solutions_to_the_Physician_Workforce.2.aspx. Accessed 9/9/15.
29. WICHE STATE AUTHORIZATION RECIPROCITY AGREEMENT (W-SARA). <http://www.wiche.edu/sara>. Accessed 5/18/15.
30. Mick SS, Lee SY. The safety-net role of international medical graduates. Health Affairs. 1999; 16(4):141-150.
31. Association of American Medical Colleges. Letter to the Honorable Kent Conrad. Available at <https://www.aamc.org/download/272830/data/aamcendorsestr Conrad-state30improvementacts1979.pdf>. Accessed November 2, 2015.
32. The White House, Office of the Press Secretary. Statement by the Press Secretary on H.J. Res. 117, S. 32345 and S. 3552. Available at <https://www.whitehouse.gov/the-press-office/2012/09/28/statement-press-secretary-hj-res-117-s-3245-and-s-3552>. Accessed November 2, 2015.
33. Young A, Chaudhry HJ, Pei X, Halbesleben K, Polk DH, Dugan M. A Census of Actively Licensed Physicians in the United States, 2014. Journal of Medical Regulation. 2015;101(2):8-23. Available at <https://www.fsbm.org/Media/Default/PDF/Census/2014census.pdf>. Accessed November 2, 2015.
34. National Resident Matching Program. Results and Data: 2015 Main Residency Match. Available at http://www.nrmp.org/wp-content/uploads/2015/05/Main-Match-Results-and-Data-2015_final.pdf. Accessed November 2, 2015.
35. Foreign Medical School Accountability Fairness Act of 2015, S.1374, 114th Cong. (2015).
36. Spero, J. C. et al. 2013. GME in the United States: A Review of State Initiatives, p. 15-18. The Cecil G. Sheps Center for Health Services Research. http://www.shepscenter.unc.edu/wp-content/uploads/2013/09/GMEstateReview_Sept2013.pdf. Accessed 4/10/15.
37. Spero, J. C. et al. 2013. GME in the United States: A Review of State Initiatives, p. 15-16. The Cecil G. Sheps Center for Health Services Research. http://www.shepscenter.unc.edu/wp-content/uploads/2013/09/GMEstateReview_Sept2013.pdf. Accessed 4/10/15.
38. Staff, T. J. et al. 2013. HRSA's PCRE Grant Recipients' Plans for Continuation After Funding Ends. <http://www.stfm.org/FamilyMedicine/Vol47Issue1/Staff51>. Accessed 4/10/15.
39. Spero, J. C. et al. 2013. GME in the United States: A Review of State Initiatives, p. 19-21. The Cecil G. Sheps Center for Health Services Research. <http://www.shepscenter.unc.edu/wp->
40. National Conference of State Legislators. 2014. Health Provider and Industry State Taxes and Fees. <http://www.ncsl.org/research/health/health-provider-and-industry-state-taxes-and-fees.aspx> Accessed 9/9/15.
41. California Medical Association. 2015. CMA takes on public health, Medi-Cal with 2015 sponsored legislation. <http://www.cmanet.org/news/detail/?article=cma-takes-on-public-health-medi-cal-with-2015> Accessed 9/7/15.
42. House Bill 1323. Indiana State Legislature. 2015. <https://iga.in.gov/legislative/2015/bills/house/1323#digest-heading> Accessed 9/7/15.
43. HB 3396 C. Oregon State Legislature. 2015. <https://olis.leg.state.or.us/liz/2015R1/Measures/Overview/HB3396> Accessed 9/7/15.