

HOD ACTION: Council on Medical Education Report 1 adopted as amended and the remainder of the report filed.

REPORT 1 OF THE COUNCIL ON MEDICAL EDUCATION (I-15)
(Resolution 931-I-14, Resolution 312-A-15)
Sources of Funding for Graduate Medical Education
(Reference Committee K)

EXECUTIVE SUMMARY

Since the Balanced Budget Act of 1997, the number of Medicare-funded graduate medical education (GME) positions has been capped at 1996 levels, and there is little political will for increasing Medicare's contribution to GME. Despite the Medicare cap, the number of residents and fellows has increased since 1997, as new training programs have been created in hospitals that previously had no GME, and hospitals have been able to obtain non-Medicare funding. This growth has occurred disproportionately in subspecialty areas. A few states have been successful at expanding GME by: 1) developing GME programs in core specialty areas; 2) expanding Medicaid funding; 3) proposing new tax structures; and 4) developing partnerships with local foundations and insurance companies. State expansion has principally been in primary care, in rural and underserved areas.

The slow growth in federal funding of GME through Medicare, and the reluctance of most states to expand Medicaid GME funding, has led to an interest in the pursuit of other sources of funding. The expansion of existing residency programs or the creation of new ones through funding other than Medicare or through state contributions is a complex process. This report briefly presents examples of private and alternative funding for GME, both current and past; describes proposals for new models of funding; and presents an example of a program expansion that can serve as the groundwork for the development of model guidelines for program expansion.

Pharmaceutical industry and private foundation support of GME has principally supported subspecialty fellowships, funded supplemental educational material that may be otherwise inaccessible, or has been in the form of grants for research and community service. Pharmaceutical support has not been without criticism, and foundations are not a likely resource for ongoing, sustainable GME program expansion on a large scale. Proposals for national models of GME funding by all payers may involve a tax, either on the number of insured enrollees or on medical billings, and do not all have the goal of increasing the number of GME positions (but may have the goal of increasing primary care positions, or decreasing reliance on Medicare funding). The example of the expansion of one family medicine program in North Carolina demonstrates the complicated undertaking of developing relationships with at least three different foundations/philanthropic organizations, as well as amplifying the support by the sponsoring institution and the clinical site.

The expansion of GME positions or programs should not occur without protections for the safety of trainees or their patients. Enthusiasm for residency program creation or expansion in the face of workforce shortages and physician geographic maldistribution should not diminish the importance of ensuring a safe and productive learning and clinical environment for both residents and patients.

The AMA recommends further study of all-payer models of GME funding, and encourages the development of state, local community, insurance industry and foundation partnerships for creating successful models of program expansion.

REPORT OF THE COUNCIL ON MEDICAL EDUCATION

CME Report 1-I-15

Subject: Sources of Funding for Graduate Medical Education
(Resolution 931-I-14, Resolution 312-A-15)

Presented by: Darlyne Menscer, MD, Chair

Referred to: Reference Committee K
(Hillary Johnson-Jahangir, MD, Chair)

1 Resolution 931-I-14, introduced by the Virginia, South Carolina, West Virginia and Kentucky
2 Delegations and referred to the Board of Trustees, asked that our American Medical Association
3 (AMA): 1) encourage and advocate for private and alternative sources of funding for graduate
4 medical education (GME) educational opportunities; 2) support when appropriate and advocate for
5 additional sources of funding for private payers to support both direct and indirect costs of graduate
6 medical education and explore funding for additional residency slots; and 3) encourage state and
7 specialty societies to seek private and alternative sources of funding for state-specific graduate
8 medical educational opportunities.

9
10 Resolution 312-A-15, introduced by the International Medical Graduates Section and referred to
11 the Board of Trustees, asked that our AMA facilitate a working group that includes the
12 International Medical Graduates Section, Medical Student Section, Resident and Fellow Section,
13 Section on Medical Schools, Council on Medical Education and other stakeholders, with the charge
14 of creating model guidelines for expansion of existing residency programs, with funding support
15 from non-federal donors.

16
17 Due to the complexity of the issues that these two items encompass, both were referred to the
18 Council on Medical Education by the AMA Board of Trustees for a report back to the House of
19 Delegates. Accordingly, this report: 1) briefly summarizes current funding for GME; 2) presents
20 examples of private and alternative funding for GME, both current and past; 3) describes proposals
21 developed for new models of funding; and 4) presents an example of a program expansion that can
22 serve as the groundwork for the development of model guidelines for program expansion.

23 24 CURRENT FUNDING FOR GRADUATE MEDICAL EDUCATION

25
26 The federal government is the primary funder of GME. In 2012, GME funding was provided by
27 Medicare (\$9.7 billion), Medicaid (\$3.9 billion), the Veterans Administration (\$1.4 billion) and the
28 Health Resources and Services Administration (\$0.5 billion).¹ Medicaid funding can be variable; if
29 a state includes GME funding in its budget, the federal government will provide matching funds
30 using a formula based on state per capita income. The number of states including GME funding in
31 their budgets has declined in recent years.² Furthermore, since passage of the Balanced Budget Act
32 of 1997, the number of Medicare-funded GME positions has been capped at 1996 levels, and there
33 have been proposals recommending further reduction in Medicare support for GME.³

34
35 Despite the Medicare cap, the number of residents and fellows has increased since 1997, as new
36 training programs have been created in hospitals that previously had no GME (Medicare will fund

1 programs in “GME-naïve” hospitals), and hospitals have been able to obtain non-Medicare
2 funding. This growth has occurred disproportionately in subspecialty areas. Between 2003 and
3 2012, the increase in the number of residents training in core specialty programs was 13.0 percent;
4 for subspecialty programs, the increase was 39.9 percent.⁴ Hospitals are able to create funding for
5 these advanced positions, for example, through clinical income provided by faculty, billings that
6 can be submitted by fellows themselves (in programs not accredited by the Accreditation Council
7 for Graduate Medical Education [ACGME]), and through various endowments.⁵

8
9 States have attempted and have been sometimes successful at expanding GME by: 1) developing
10 GME programs in core specialty areas; 2) increasing Medicaid funding; 3) proposing new tax
11 structures; and 4) developing partnerships with local foundations and insurance companies. State
12 expansion has principally been in primary care, in rural and underserved areas. Where funding has
13 been realized, it has been for program creation, thus covering accreditation costs, hiring support
14 staff, purchasing new equipment and so forth. Once a hospital has residents enrolled and is
15 receiving Medicare funds, the state program typically ceases to support the hospital (Council on
16 Medical Education Report 7-A-14, Physician Workforce Shortage: Approaches to GME
17 Financing).

18 19 PRIVATE OR ALTERNATIVE FUNDING FOR GME

20 21 *Examples of industry/private support*

22
23 The Rheumatology Research Foundation, part of the American College of Rheumatology, has
24 administered the Amgen Fellowship Training Award, supported by Amgen, Inc, since 2005.⁶ The
25 Foundation is the largest private funding source of rheumatology training and research programs in
26 the United States. In 2014 there were 29 fellows whose funding was supported in part by \$50,000
27 for one year, awarded to the training program.

28
29 Similarly, the Neurosurgery Research and Education Foundation of the American Association of
30 Neurological Surgeons acquires funding from several medical device companies to create \$50,000
31 to \$75,000 fellowships for clinical training in areas such as spinal surgery, general neurosurgery
32 and endovascular neurosurgery. In the 2012-13 academic year the program sponsored such
33 fellowships at 20 academic medical centers.⁷

34
35 GME support from private sources or pharmaceutical companies has created controversy. The
36 American Academy of Dermatology developed a pilot program in 2006 to provide funding to
37 dermatology programs to support 10 residents at \$60,000 per year.⁸ The program was withdrawn
38 after the pilot, partly because of concerns that the shortage of dermatologists was not dire enough
39 to risk an apparent conflict of interest between education and the pharmaceutical companies
40 involved.⁷ Under the Physician Payments Sunshine Act, it is likely that a company will report to
41 the Centers for Medicare & Medicaid Services that payments have been made to individual
42 residents and fellows (equally divided) in a training program that it is supporting, even though
43 payments were indirect and made to the institution. A private firm that assists international medical
44 graduates (IMGs) in finding residency positions has proposed to privately fund positions, although
45 there is no evidence to suggest this has occurred.⁹

46
47 The Menninger Clinic, when based in Topeka, Kansas, created a private endowment that aided in
48 financing its GME.¹⁰ Other foundations exist to fund supplemental educational material that may
49 be otherwise inaccessible.¹¹ The role of foundations in GME has principally been in providing
50 grants for research and community service. Presented with a hypothetical decrease in Medicare
51 funding for GME, over half of designated institutional officials said they would turn to private

1 philanthropy for assistance in funding resident positions.¹² Foundations would not be a likely
2 resource for ongoing, sustainable GME program expansion on a large scale.

3
4 *Foreign governments*

5
6 The Medical and Health Sciences program of the Saudi Arabian Cultural Mission (SACM) places
7 students and physicians in U.S. institutions for pre- and post-graduate education. Established in
8 2007, the program sponsors over 4,100 students and physicians enrolled in 188 affiliated
9 universities and teaching hospitals. Participating GME programs have resident slots with a separate
10 National Resident Matching Program (NRMP) code to indicate that they are reserved for SACM
11 applicants. These applicants are selected using the same standards as other applicants. Once
12 enrolled in the GME program, SACM scholarships pay for the training of the resident, thus
13 allowing a program to expand even if the institution is over the cap.¹³ In 2015, 17 programs
14 participated and 21 Saudi Arabian physicians were matched into positions.¹⁴

15
16 PROPOSED NEW NATIONAL MODELS OF FUNDING

17
18 Calls for systems of funding GME that include all who benefit from a well-trained physician
19 workforce, i.e., all payers, are not new.¹⁰ Given the escalating demand for residency positions as a
20 result of the increase in the number of medical school graduates, proposals resulting in increased
21 funding for entry-level positions would enable more physicians to complete the training necessary
22 for licensure and to serve U.S. health care needs. Not all proposals seek to increase training
23 positions.

24
25 The Center for American Progress, a nonpartisan policy institute, has proposed a plan that would
26 reduce federal spending on health care, called the Senior Protection Plan. Included in the plan is a
27 suggestion that private insurers should support funding of GME, at \$2 per enrollee. This fee would
28 comprise less than 5% of total GME financing. The proposal further suggested that Medicare
29 payments towards GME should be reduced a commensurate amount; therefore, this plan would not
30 necessarily increase the number of training positions.¹⁵

31
32 The GME Initiative, a collaboration of health care consumers and leaders in family medicine
33 residency training, proposes a system that addresses expanding primary care by removing the cap
34 on primary care positions; increasing salaries for primary care residents; expanding Title VII
35 funding for community-based training programs; providing funding directly to primary care
36 programs, educational consortia or non-hospital community agencies; and rewarding programs that
37 produce primary care physicians (assessed five-years post-graduation).¹⁶ This funding is to come
38 through Medicaid, Medicare and all insurers, and not be based on the percentage of Medicare
39 patients a hospital reports or other complex formulas; however, this proposal does not describe how
40 this funding allocation would transpire, other than stating that current GME funding would need to
41 be reallocated to meet workforce needs, and that all payers should contribute.

42
43 A more thoroughly described all-payer system would create GME funding by assessing
44 government and non-government health care payers, be it Medicare, Medicaid, private insurers or
45 individuals, at 0.6 percent per encounter.¹⁷ This assessment, which would be collected through a
46 modifier of existing billing codes, would fund the Medical Education Workforce (MEW) trust
47 fund. As an example, total national health expenditures for 2013 from all sources were more than
48 \$2.9 trillion. Assessing those expenditures at 0.6 percent would generate \$17.5 billion for GME,
49 which is \$2 billion more than the GME funds contributed by Medicare, Medicaid, the Veterans
50 Administration, and HRSA in 2012. This assessment, 0.6 percent, approximates the percentage of
51 total national health expenditures spent on GME in 2012. Through the MEW fund, indirect and

1 direct GME dollars would be replaced with a funds-flow mechanism using fees paid for services by
 2 all payers that would provide direct compensation to physicians and institutions that actively
 3 participate in medical education. To encourage teaching of medical students, residents and fellows,
 4 educators and facilities would receive an incremental educational incentive from the MEW fund.
 5 This incentive, also based on a modifier of existing billing codes, would equate to approximately a
 6 10 percent payment per clinical encounter for those physicians engaged in teaching. A facility
 7 incentive fund would function like the indirect medical education (IME) dollars currently
 8 distributed.

9
 10 Because of the surplus generated with the MEW fund (compared to 2012 dollars), additional
 11 residency positions could be created, even though Medicare and Medicaid contributions would
 12 actually be less than before the MEW fund. This model also proposes a “tuition-for-service”
 13 program designed to fund the majority of undergraduate medical education, which would assist in
 14 creating a physician workforce that is suited to U.S. health care needs. Through eliminating
 15 graduation debt, a structured service commitment would be created to better serve communities
 16 across all medical specialties and geographies.

17 18 PROGRAM EXPANSION FROM THE GROUND-UP

19
 20 An already established family medicine program at an academic medical center (AMC) has
 21 expanded the program by two slots per year into a Federally Qualified Health Center (FQHC)
 22 without receiving Medicare funding (as the AMC has reached its funding cap) or state funding.
 23 This expansion was the result of combining funding from multiple sources, including the Blue
 24 Cross Blue Shield Foundation of North Carolina for startup funds (but not salary support for the
 25 residents); a Health Resources and Services Administration (HRSA) Academic Administrative
 26 Units (AAU) grant in primary care for resident salaries; and the Duke Endowment for additional
 27 salary support for residents for three years to help establish the program. This expansion was
 28 assisted by the presence of an established strong infrastructure from the AMC, a well-established
 29 FQHC, and a specialty (family medicine) that generates substantial billing, the result of training
 30 requirements for family medicine of four to five half days of clinics. Without the various grants
 31 (but with the support of existing infrastructure), the costs per resident are estimated to be \$60,000
 32 to \$70,000 per year, including licensing, meals, etc. Future funding is uncertain, as the grants are
 33 time-limited. A grant from the Golden Leaf Foundation will allow the program to expand to three
 34 residents per year in the 2016 match. The program director is looking to the University of North
 35 Carolina Healthcare System, the North Carolina AHEC (Area Health Education Center) and the
 36 state legislature for additional funding.¹⁸

37
 38 Based on this experience, the following may serve as some key best practices as well as
 39 groundwork for development of model guidelines for GME program expansion and creation.

40 41 *Suggested first steps for program expansion*¹⁸

- 42
- 43 • State money may be available. Examine how state Medicaid funds are allocated and
 44 whether they support GME, and if so, how the allocation is determined. In states with their
 45 own Affordable Care Act Exchanges, there may be an option to use a tax on the exchange
 46 to help pay for local GME.
 - 47 • Perform an exhaustive search of all statewide philanthropic organizations and insurance
 48 company foundations that support economic development or health care, including those
 49 that address health disparities or other social determinants of health. Make exploratory
 50 contact with those groups to discuss program expansion rather than waiting for a Request
 51 for Proposals.

- 1 • Consider partnering with a large local employer that may see a pipeline of needed primary
2 care physicians as being in their own interest.
- 3 • Work with large local hospitals or healthcare systems to understand their dependency on an
4 adequate pipeline of physicians to encourage their participation in support of GME.

5
6 *Suggested first steps for new program development*¹⁹
7

- 8 • Feasibility Study: An independent feasibility study showing the need for GME, the
9 capacity in the region among one or more hospitals working in partnership to develop and
10 sustain high-quality residency training programs (that could achieve full accreditation from
11 the ACGME), and the financial commitment required from the region to invest “first
12 dollars” potentially matched by state funds.
- 13 • Business Plan: A detailed business plan for expanding medical education showing the
14 governance structure for a consortium among one or more hospitals, community health
15 centers, and other partners; the number of residents to be trained in one or more programs;
16 a staffing and financial plan for long term support of quality residency training programs;
17 and an economic impact statement.

18
19 ETHICAL AND QUALITY CONCERNS AND AMA POLICY
20

21 Concerns about private support of GME have led to the development of principles by the ACGME,
22 which stipulate in part that: 1) sponsoring institutions ensure that residents, fellows, and programs
23 not be identified publically by their funding sources; and 2) sponsoring institutions maintain
24 policies that ensure non-preferential treatment of residents and fellows in the learning environment
25 based upon sources of funding for their positions.²⁰ Typical policies at GME institutions state that
26 the private funder does not select the trainee to receive the funds, but that the selection is made by
27 the department, division, or program. In addition, the department chair may be named the recipient,
28 who then may be reported as accepting funds under the Sunshine Act. The ACGME has more
29 recently stressed that a reduction in federal support for GME may drive programs to deliberately
30 seek out industry support.²¹
31

32 Similarly, the AMA has policy in its *Code of Medical Ethics*, Opinion 8.061 Gifts to Physicians
33 from Industry, stating that “Academic institutions and residency and fellowship programs may
34 accept special funding on behalf of trainees to support medical students’, residents’, and fellows’
35 participation in professional meetings, including educational meetings, provided the program
36 identifies recipients based on independent institutional criteria; and funds are distributed to
37 recipients without specific attribution to sponsors.”²² AMA also has policy regarding “Residency
38 Positions for Sale,” expressing that selection of residents should be based on academic and
39 personal qualifications, and that monetary considerations should not compromise the selection
40 process. (Policy H-310.983)
41

42 Private funding of GME programs could theoretically be taken on by a local business or medical
43 group.²³ Care would need to be taken to prevent the effect of a restrictive covenant, in that the
44 funder would require the graduating resident to work for the funder. The ACGME prohibits
45 training programs or institutions to “require a resident/fellow to sign a non-competition guarantee
46 or restrictive covenant.”²⁴
47

48 As programs are expanded or created, ACGME requirements should protect residents and patients
49 from a training situation in which there are not enough patients to guarantee educational quality,
50 insufficient clinic space to practice safely, or lack of appropriate supervision to confirm

1 competency, as well as protecting residents from exploitation. Enthusiasm for residency program
2 creation or expansion in the face of workforce shortages and physician geographic maldistribution
3 should not diminish the importance of ensuring a safe and productive learning and care
4 environment for both residents and patients. Not all physicians train in ACGME-accredited
5 programs; some non-ACGME-accredited fellowships may be created with expectations of work
6 productivity and revenue generation that exceed what may be safely accomplished.

7
8 SUMMARY AND RECOMMENDATIONS

9
10 For the most part, private and alternative funding of GME, so far, has been “around the edges.”
11 Evidence of full-scale funding of a GME program by foundations or private industry was not
12 uncovered. Funding of educational opportunities or of some portion of a program complement is
13 the more typical route. Foundations have worked together with states to expand GME. The
14 successful program expansion in North Carolina depended upon the contributions of at least three
15 different foundations/philanthropic organizations, as well as support by the sponsoring institution
16 and the clinical site.

17
18 For communities, health systems and other entities planning to start or expand their GME
19 activities, this report outlines some steps to consider. These steps will allow planners of new GME
20 programs to consider all currently known options for such funding. Which of these will become a
21 successful financial resource will largely depend on the profile of the local community, the goals of
22 the proposed GME programs and the needs they will meet. This report also encourages sharing of
23 successful, innovative funding proposals for GME. This will allow communities, health systems,
24 training programs and trainees in need of GME slots to benefit from the experience of others.

25
26 Proposals to fund GME by all payers could lead to an increase in the number of physicians in
27 GME, and could also alter the specialty and geographic distribution of physicians to be more
28 aligned with the nation’s health care needs. Given the scrutiny Medicare funding of GME has
29 received of late, there may now be a greater prospect of developing a new payment system that
30 could fund and shape a more appropriate physician workforce. Whether private payers, both
31 insurers and individuals, can be enjoined to participate in such a system is open to debate, and
32 would likely require legislation. Working towards such a transformation will necessitate a coalition
33 of stakeholders willing to persevere as well as compromise.

34
35 The Council on Medical Education therefore recommends that the following recommendations be
36 adopted in lieu of Resolution 931-I-14 and Resolution 312-A-15 and that the remainder of the
37 report be filed.

- 38
39 1. That our American Medical Association (AMA) reaffirm Policy D-305.967 (8), The
40 Preservation, Stability and Expansion of Full Funding for Graduate Medical Education, which
41 advocates for continued and expanded contribution by all payers for health care (including the
42 federal government, the states, and local and private sources) to fund both the direct and
43 indirect costs of graduate medical education. (Reaffirm HOD Policy)
44
45 2. That our AMA explore various models of all-payer funding for GME, especially as the
46 Institute of Medicine (now a program unit of the National Academy of Medicine) did not
47 examine those options in its 2014 report on GME governance and financing. (Directive to
48 Take Action)
49
50 3. That our AMA encourage all funders of GME to adhere to the Accreditation Council for
51 Graduate Medical Education’s requirements on restrictive covenants and its principles guiding

- 1 the relationship between GME, industry and other funding sources, as well as the AMA's
2 Opinion 8.061, and other AMA policy that protects residents and fellows from exploitation,
3 including physicians training in non-ACGME-accredited programs. (New HOD Policy)
4
- 5 4. That our AMA encourage organizations with successful existing models to publicize and
6 share strategies, outcomes and costs. (Directive to Take Action)
7
- 8 5. That our AMA encourage insurance payers and foundations to enter into partnerships with
9 state and local agencies as well as academic medical centers and community hospitals seeking
10 to expand GME. (Directive to Take Action)
11
- 12 6. That our AMA encourage entities planning to expand or start GME programs to develop a
13 clear statement of the benefits of their GME activities to facilitate potential funding from
14 appropriate sources given the goals of their programs. (New HOD Policy)

Fiscal note: \$5,000.

REFERENCES

- ¹ *Graduate Medical Education That Meets the Nation's Health Needs*. Washington, DC: Institute of Medicine. 2014. <http://www.iom.edu/Reports/2014/graduate-medical-education-that-meets-the-nations-health-needs.aspx>. Accessed July 29, 2014.
- ² O'Shea, JS. Reforming graduate medical education in the U.S. *Background*. 2014;2983. <http://www.heritage.org/research/reports/2014/12/reforming-graduate-medical-education-in-the-us>. Accessed April 1, 2015.
- ³ *Report to the Congress: Aligning Incentives in Medicare*. Washington, DC: Medicare Payment Advisory Commission. 2010. http://www.medpac.gov/documents/reports/Jun10_EntireReport.pdf. Accessed November 25, 2013.
- ⁴ Holt, KD, Miller, RS, Philibert, I, Nasca, TJ. Patterns of change in ACGME-accredited residency programs and positions: implications for the adequacy of GME positions and supply of physicians in the United States. *J Grad Med Educ*. 2014;6(2):399-403.
- ⁵ Snow, BW, Wallis, MC. How pediatric urology fellowships in the United States are funded. *Front Pediatr*. 2014;2:119. <http://dx.doi.org/10.3389/fped.2014.00119>. Accessed March 26, 2015.
- ⁶ St. Clair, EW. Rheumatology fellowship training in the US: the REF stimulus. *The Rheumatologist*. March 2010. <http://www.the-rheumatologist.org/article/rheumatology-fellowship-training-in-the-u-s-the-ref-stimulus/>. Accessed March 26, 2015.
- ⁷ *Conflict-of-Interest Policies for Academic Medical Centers: Recommendations for Best Practices*. Philadelphia, PA: The Pew Charitable Trusts. 2013.
- ⁸ Kuehn, BM. Pharmaceutical industry funding for residencies sparks controversy. *JAMA*. 2005;293(13):1572-1580.
- ⁹ Privately funded residency. AmeriClerkships Medical Society. <http://americlerkships>. Accessed March 25, 2015.
- ¹⁰ Einhom, TA, Gottlieb, S. Medical education needs private funds. *AAOS On-line Service Bulletin*. August 1998. <http://www2.aaos.org/bulletin/aug98/ptview.htm>. Accessed March 2, 2015.
- ¹¹ Tocce, K, Severson, B. Funding for abortion training in Ob/Gyn residency. *Virtual Mentor*. 2012;14(2):112-117.
- ¹² Holt, KD, Miller, RS, Philibert, I, Nasca, TJ. Effects of potential federal funding cuts on graduate medical education: results of a survey of designated institutional officials. *J Grad Med Educ*. 2014;6(1):183-188.
- ¹³ Saudi Arabian Cultural Mission, Department of Medical and Health Science Program. <http://www.sacm.org/MedicalUnit/MedicalUnit.aspx>. Accessed June 2, 2015. Personal communication with a participating program director.
- ¹⁴ National Resident Matching Program, Results and Data: 2015 Main Residency Match®. National Resident Matching Program, Washington, DC. 2015.
- ¹⁵ *The Senior Protection Plan: \$385 Billion in Health Care Savings Without Harming Beneficiaries*. Washington, DC: Center for American Progress. 2012. <https://www.americanprogress.org/issues/healthcare/report/2012/11/13/44590/the-senior-protection-plan/>. Accessed March 27, 2015.
- ¹⁶ Voorhees, KI, Prado-Gutierrez, A, Epperly, T, Derksen, D. A proposal for reform of the structure and financing of primary care graduate medical education. *Fam Med*. 2013;45(3):164-170.
- ¹⁷ Gold, JP, Stimpson, JP, Caverzagie, KJ. Envisioning a future governance and funding system for undergraduate and graduate medical education. [published online ahead of print July 20, 2015]. *Acad Med*. doi: 10.1097/ACM.0000000000000816.
- ¹⁸ Evan Ashkin, MD, personal communication.
- ¹⁹ *Expanding Graduate Medical Education in Indiana*. Pittsburgh, PA: Tripp Umbach. 2014. http://evansville.medicine.iu.edu/files/9314/3215/2212/State_of_Indiana_GME_Expansion_Approach_with_Southwest_IN_as_Pilot.pdf. Accessed July 6, 2015.
- ²⁰ *Principles to Guide the Relationship between Graduate Medical Education, Industry, and Other Sources for Programs and Sponsoring Institutions Accredited by the ACGME*. Chicago, IL: ACGME. 2011. https://www.acgme.org/acgmeweb/Portals/0/PFAssets/PublicationsPapers/pp_GMEGuide.pdf. Accessed March 2, 2015.
- ²¹ *ACGME Letter to: American Board of Medical Specialties; American Hospital Association; American Medical Association; Association of American Medical Colleges; Council of Medical Specialty Societies*. Chicago, IL: ACGME. 2011. http://acgme.org/acgmeweb/Portals/0/PDFs/Nasca-Community/ACGME_Statement_on_Medicare_GME_Reimbursement2011.pdf. Accessed July 22, 2015.

²² Opinion 8.061 - Gifts to Physicians from Industry. AMA Code of Medical Ethics. <http://www.ama-assn.org/ama/pub/physician-resources/medical-ethics/code-medical-ethics/opinion8061.page>. Accessed June 22, 2015.

²³ Kritzer, AG. Local hospital CEOs want private fund for more residencies. Jacksonville Business Journal November 18, 2011. <http://www.bizjournals.com/jacksonville/print-edition/2011/11/18/local-hospital-ceos-want-private-fund.html?>. Accessed March 27, 2015.

²⁴ *Institutional Requirements*. Chicago, IL: ACGME. 2013. https://www.acgme.org/acgmeweb/Portals/0/InstitutionalRequirements_07012014.pdf. Accessed June 2, 2015.