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Contained in the Handbook Addendum

REPORT OF THE BOARD OF TRUSTEES

B of T Report 25-A-19

Subject: All Payer Graduate Medical Education Funding

Presented by: Jack Resneck, Jr., MD, Chair

Referred to: Reference Committee C
(Nicole Riddle, MD, Chair)

INTRODUCTION

At the 2018 Annual Meeting, the House of Delegates adopted Policy D-305.967, "The Preservation, Stability and Expansion of Full Funding for Graduate Medical Education," which asks that our AMA:

> …investigate the status of implementation of AMA Policies D-305.973, "Proposed Revisions to AMA Policy on the Financing of Medical Education Programs" and D-305.967, "The Preservation, Stability and Expansion of Full Funding for Graduate Medical Education" and report back to the House of Delegates with proposed measures to resolve the problems of underfunding, inadequate number of residencies and geographic maldistribution of residencies.

BACKGROUND

An Overview of Graduate Medical Education

Graduate medical education (GME) programs account for nearly three-quarters of the U.S. Department of Health & Human Services' (HHS) health workforce expenditures, and may be a strong policy lever to impact patient access to care because the number of medical school graduates who obtain and complete a residency determines the size of the physician workforce and the types of residencies they complete determine its specialty composition.[1] Also, where physicians complete their residencies often affects where they establish their practices.[2] As a result, policies that alter federal funding for GME may impact future physician supply and could be used to address certain workforce concerns.

Although the federal government is not the sole contributor to GME funding, it is by far the largest single source, primarily through Medicare funding. Medicare funding to support GME programs comes from direct GME funding and indirect GME funding. Direct GME (DGME) funding represents approximately one-third of all Medicare support for GME. It supports the direct costs of running a residency program and covers salaries for residents and faculty as well as educational support. Indirect GME payments (IME), which represent the majority of Medicare GME funding, are calculated based on the size of a hospital, the number of residents supported, and the number of Medicare inpatients treated. IME payments are in addition to payments an institution receives from Medicare reimbursement and are meant to offset the costs of maintaining an educational program that are not captured by Medicare reimbursement. Both IME and DGME payments are derived by complex formulas and are not designed to account for differences in costs resulting from training residents of different specialties. The Department of Veterans Affairs, Medicaid, and the Children's

Health Insurance Program are other federal sources of GME funding of varying levels. In addition, the Army, Navy, and Air Force support their own in-house residencies and fellowships to provide for the future physician workforce needs of those services.

Federal Funding for Graduate Medical Education[3]

Program Name *Control over trainees*	**Total Funding**	**Number of Trainees**	**Cost Per Trainee**
MANDATORY FUNDING			
Medicare GME Payments *The number of Medicare-supported residents and per-resident payment amount is capped for each hospital, but hospitals determine staffing needs and types of residents with the exception of certain primary care residents.*	FY2015 (est.): $10.3 - $12.5 billion	FY2015 (est.): 85,712 - 87,980 FTE (DGME) slots 85,578 - 88,416 FTE (IME) slots	FY2015 (est. average): $112,000 - 129,000 per FTE
Medicaid GME Payment *States are permitted to make these payments using their own criteria to determine which providers are eligible for payments.*	N/A.	N/A The Medicaid program does not require states to report these data.	N/A. The Medicaid program does not require states to report these data.
Teaching Health Centers GME Payment Program *Funding to applicant teaching health centers that meet the program's eligibility requirements.*	FY2018: $126.5 million (est.)	AY2016-AY2017: 742 FTE slots 771 total residents trained	N/A.
DISCRETIONARY FUNDING			
Veterans Affairs GME Payments *VA facilities determine their staffing needs and the number and type of residents supported.*	FY2017: $1.78 billion	AY2016-AY2017: 11,000 FTE slots and > 43,565 residents spent part of their training at a VA facility	FY2015 (est.): $137,792/resident
Children's Hospital GME Payment Program *Grant funding awarded to applicant children's hospitals that meet the program's eligibility requirements.*	FY2019: $325bmillion	FY2016-FY2017 58 hospitals received payments to support 7,164 FTE slots	N/A
Department of Defense GME Payments *Divisions of the armed forces determine their staffing needs and the number and type of residents supported.*	FY2012: $16.5 million	FY2017: 3,983 FTE residents	N/A

Source: CRS analysis of agency data, including review of various agency budget justification and The Robert Graham Center program data sourced from CMS Medicare hospital cost report data, and GAO report, *Physician Workforce: HHS Needs Better Information to Comprehensively Evaluate Graduate Medical Education Funding* (GAO-18-240, 2018).

Notes: AY = Academic year; Academic year 2016-2017 began on July 1, 2016, and concluded on June 30, 2017. DGME = direct graduate medical education. est. = estimate. FTE = full time equivalent. FY = fiscal year. IME = Indirect Medical Education. N/A = not available. VA = the Department of Veterans Affairs.

Data on Medicaid GME funding are limited. The Centers for Medicare & Medicaid Services (CMS) began collecting information about Medicaid GME payments made through the fee-for-service delivery system in FY2010 through the CMS-64 data. Other information about Medicaid GME payments is available from the Association of American Medical Colleges (AAMC) and U.S. Government Accountability Office (GAO). AAMC conducts a 50-state survey about Medicaid GME payments every two to three years. According to AAMC's 2016 50-state survey, in 2015, the overall level of support for GME continued to grow, reaching $4.26 billion. This represents a significant increase since 1998, when Medicaid GME support totaled $2.3–$2.4 billion. However, three states reported in 2015 that they explicitly reduced GME payments; another seven states reported their total 2015 GME payments decreased by 10 percent or more over 2012 levels.[4]

The Medicare GME Caps

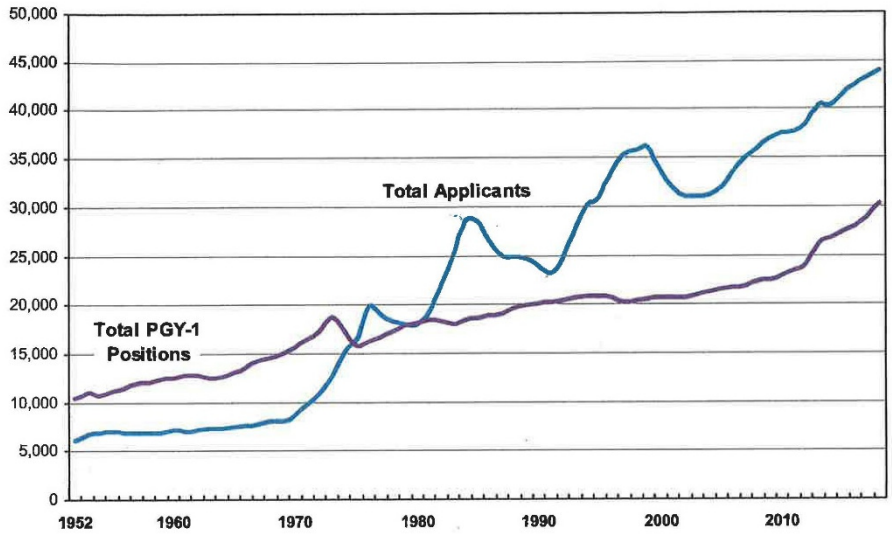
Medicare's GME support was initially open-ended, where Medicare would pay for additional full time equivalent (FTE) residents that hospitals trained. In 1997, GME stakeholders released a consensus statement arguing that the United States was on the verge of a serious oversupply of physicians and recommending limiting federal funding of GME positions to more align with the

number of graduates of accredited U.S. medical schools.[5] Congress enacted the Balanced Budget Act of 1997, (P.L. 105-33), which limits Medicare's GME—most hospitals would receive DGME and IME support only for the number of allopathic and osteopathic FTE residents it had in training in 1996; in other words, the number of positions Medicare supported in each hospital in 1996 was established as the upper limit in terms of the number of positions or slots that Medicare would fund in those institutions thereafter. Slots, which may be occupied by residents or fellows, do not directly correspond to a specific individual, as residents or fellows may spend periods of a given year at different facilities, or doing research. Residents may not be counted simultaneously for payment by two government programs. Therefore, when residents are located at different facilities, they are not counted by the sponsoring hospital.

The Medicare cap is not absolute. Medicare provides GME funding to newly constructed hospitals that introduce residency programs and to existing hospitals that did not previously sponsor residency training. Furthermore, the GME cap is not calculated and implemented until new teaching programs' fifth year; this is meant to offer institutions time to build and scale their programs to appropriate levels.

Since the Medicare cap was enacted, hospitals have expanded the number of residents they are training by using non-Medicare sources of support (e.g., hospital, state, or local funds). Specifically, in the 20 years since the cap was enacted, the number of residency slots has increased by approximately 27 percent. Generally, these increases have been in subspecialties (i.e., for fellowship training); subspecialty services tend to generate higher revenue or impose lower cost burden on hospitals. In addition, Medicare GME slots have been redistributed since the cap was enacted. For example, the Affordable Care Act included two redistribution programs—the first redistributed unused slots, and the second continually redistributes slots from closed hospitals. However, caps on the number of resident trainees imposed by Medicare continue to further restrict the number of residency positions offered and provide teaching hospitals with little flexibility for expansion.

Figure 1 **Applicants and 1st Year Positions in the Match, 1952 - 2018**



Source: https://mk0nrmpcikgb8jxyd19h.kinstacdn.com/wp-content/uploads/2018/04/Main-Match-Result-and-Data-2018.pdf

Furthermore, based on the projected physician shortfall that is expected by 2030, the cap established in 1997 is outdated and will continue to cause stress on a health care system already

beginning to show signs of strain in communities lacking sufficient numbers of physicians to care for individuals living in these rural and underserved areas. It is projected that physician demand will grow faster than supply, leading to a projected total physician shortfall of between 42,600 and 121,300 physicians by 2030. A primary care shortage of between 14,800 and 49,300 physicians is projected by 2030. With regard to non-primary care specialties, a projected shortfall of between 33,800 and 72,700 physicians is expected, including a shortfall of between 20,700 and 30,500 physicians in 2030 for surgical specialties. Major drivers of these projected trends continue to be an aging population requiring increasingly complex care concomitant with an aging physician workforce.[6]

DISCUSSION

AMA Advocacy

For more than a decade, the AMA has advocated for the modernization of GME, calling for increased funding for medical residency slots, development of innovative practice models as well as residency positions that reflect societal needs. Below is an overview of recent advocacy efforts by the AMA in this area. The advocacy efforts detailed below were taken by the AMA in accordance to and in concert with the policy directives outlined in AMA Policy D-305.973, "Proposed Revisions to AMA Policy on the Financing of Medical Education Programs," and Policy D-305.967, "The Preservation, Stability and Expansion of Full Funding for Graduate Medical Education."

Congressional Advocacy

The AMA advocated in support of the following federal bills that were introduced during the 115th Congress (2017-2018):

- The Advancing Medical Resident Training in Community Hospitals Act of 2017 (S. 1291/H.R. 4552) – The bill would have closed a loophole in GME cap-setting criteria affecting hospitals who host small numbers of residents for temporary training assignments. The AMA submitted a support letter in June 2018.
- The Resident Physician Shortage Act of 2017 (S. 1301/H.R. 2267) – The bill would have provided 15,000 additional Medicare-supported GME positions over five years. The AMA submitted a support letter in June 2017.
- The Teaching Health Centers Graduate Medical Education (THCGME) Extension Act of 2017 (S. 1754/H.R. 3394) – The bill would have reauthorized the THCGME program for an additional three years and support program expansion to serve more rural and underserved communities. The AMA submitted a support letter in September 2017.
- The Conrad 30 and Physician Access Reauthorization Act (S.898/H.R.2141) – The bill would have reauthorized the J-1 visa waiver program for an additional three years, protecting patient access to care in medically underserved areas across the United States. The AMA submitted a support letter in May 2017. In 2013 and 2015, the AMA also actively supported legislation to reauthorize Conrad 30.
- Opioid Workforce Act of 2018 (S.2843/H.R. 5818) – The bill would have increased the number of residency positions eligible for GME under Medicare for hospitals that have addiction or pain management programs, with an aggregate increase of 1,000 positions over a five-year period. The AMA submitted a support letter in June 2018.

The AMA is advocating for the following federal bills that have been introduced during the 116th Congress (2019-2020):

- The Community and Public Health Programs Extensions Act (S. 192) – The bill would reauthorize $310M for the National Health Service Corps, $126M for THCGME programs, and $4B for Community Health Centers for each fiscal year from 2019 to 2024. The AMA has submitted a support letter.
- Rural Physician Workforce Production Act of 2019 (S. 289) **–** The bill would establish a national per resident payment amount in order to make accepting residents a financially viable option for rural hospitals.
- Training the Next Generation of Primary Care Doctors Act of 2019 (S. 304) – The bill provides funding for current THCGME programs and supports and funds the creation of new programs and/or centers, with a priority for those serving rural and medically underserved populations and areas.
- Resident Physician Shortage Reduction Act of 2019 (S. 348) – The bill would provide 15,000 additional Medicare-supported GME positions over five years. The AMA has submitted a support letter.

The Compendium of GME Initiatives

- The AMA has long-focused on ways to improve GME to ensure medical students can fulfill training requirements and become practicing physicians. The "Compendium of Graduate Medical Education Initiatives" was created and distributed in 2016. It provides background regarding the challenges faced by the current GME system and GME initiatives, including those by the AMA, private, and state-based stakeholders. It also provides a snapshot of AMA's advocacy efforts through 2016. The GME Compendium will be updated in 2019 to include relevant federal and state legislation, regulatory proposals, and state-based initiatives that have emerged since 2016. The updated version will also reflect any changes in AMA HOD policy.

Cap-Flexibility

- GME cap-flexibility is an emerging policy concept which calls for targeted policy efforts to provide new teaching hospitals in underserved areas flexibility and additional time in establishing Medicare-funded GME caps. In October 2017, in accordance with AMA policy D-305.967 (31), the AMA advocated in a letter to CMS that the agency provide for more flexibility in the graduate medical education cap-setting deadline, particularly for new residency programs in underserved areas and/or economically-depressed areas.

Reimagining Residency

- In 2013, the AMA instituted the "Accelerating Change in Medical Education" initiative by making grants to medical schools to support undergraduate medical education innovation. "Reimagining Residency" is the next phase in this initiative. The aim of this five-year $15-million grant program is to significantly improve GME through bold, rigorously evaluated innovations that align residency training with the needs of patients, communities and the rapidly changing health care environment. Funding will be provided to U.S. medical schools, GME programs, GME sponsoring institutions, health systems and other organizations associated with GME to support bold and innovative projects that promote systemic change in graduate medical education.

SaveGME.org

- The AMA created the SaveGME.org webpage in 2013 as a grassroots advocacy platform that medical students and residents could use to apply pressure to lawmakers in favor of preserving

essential funding for GME. In 2017, the SaveGME.org website was updated to include public-facing messaging and educational materials. To date, more than 3,000 medical students and residents have taken action via SaveGME.org to urge their members of Congress not to make cuts to GME.

2019 Medical Student Advocacy & Region Conference (MARC)

- Each year, approximately 400 medical students participate in the MARC and advocate for increased GME funding. Medical students learn about relevant legislation and lobby their Members of Congress on Capitol Hill in Washington, DC.

Increased Accountability and Transparency to Support Increased GME Funding

The federal government supports workforce data collection and projections of future needs. In addition, researchers and advocates also collect and disseminate such data. Such data are necessary inputs for GME policy but are not sufficient to comprehensively determine whether the federal investment in GME training meets national physician workforce needs. The information agencies collect is not always complete or consistent within or across programs. For example, national data on GME training costs are not systematically collected, and some agencies lacked data to determine the total amount spent or the outcomes of their programs, such as where supported residents went on to practice. Furthermore, HHS currently cannot target Medicare GME funding to specific areas of workforce need because funds are disbursed based on a statutory formula that is unrelated to projected needs.[7] The AMA agrees with the GAO that comprehensive information is needed to identify gaps between federal GME programs and national physician workforce needs—particularly the distribution of physicians geographically or across specialties—and to recommend to Congress and the Administration changes to improve the efficient and effective use of federal funds to meet those needs.[8,9] Therefore, it is recommended that AMA Policy D-305.967, "The Preservation, Stability and Expansion of Full Funding for Graduate Medical Education," be amended to call on the AMA to encourage HHS to coordinate with federal agencies that fund GME training to identify and collect information needed to effectively evaluate how hospitals, health systems, and health centers with residency programs are utilizing these financial resources to meet the nation's health care workforce needs.

CONCLUSION

The AMA has extensive policy in support of a broad spectrum of GME-related issues and remains a strong advocate for the modernization and increased funding of GME. The AMA will continue to advocate for legislation that removes the caps on Medicare funding of GME positions for resident physicians that were imposed by the Balanced Budget Amendment of 1997 and increases support and funding for GME programs in the U.S. The AMA will also update the "Compendium of Graduate Medical Education Initiatives" to reflect current proposals related to GME. Furthermore, the Board recommends the adoption of additional policy to encourage the Secretary of the U.S. Department of Health and Human Services to coordinate with federal agencies that fund GME training to identify and collect information needed to effectively evaluate how hospitals, health systems, and health centers with residency programs are utilizing these financial resources to meet the nation's health care workforce needs.

RECOMMENDATIONS

1. The Board recommends that our AMA amend Policy D-305.967, "The Preservation, Stability and Expansion of Full Funding for Graduate Medical Education," with the addition of a new clause to read as follows, and that the remainder of the report be filed:

   Our AMA encourages the Secretary of the U.S. Department of Health and Human Services to coordinate with federal agencies that fund GME training to identify and collect information needed to effectively evaluate how hospitals, health systems, and health centers with residency programs are utilizing these financial resources to meet the nation's health care workforce needs. This includes information on payment amounts by the type of training programs supported, resident training costs and revenue generation, output or outcomes related to health workforce planning (i.e., percentage of primary care residents that went on to practice in rural or medically underserved areas), and measures related to resident competency and educational quality offered by GME training programs. (Modify Current HOD Policy)

2. That our AMA rescind section 33 of Policy D-305.967, which directed the AMA to conduct the study herein. (Rescind HOD Policy)

Fiscal Note: Less than $500

REFERENCES

[1] Congressional Research Service (CRS), Federal Support for Graduate Medical Education: An Overview, pg. 1, December 27, 2018, https://fas.org/sgp/crs/misc/R44376.pdf
[2] Id.
[3] Id.
[4] Medicaid Graduate Medical Education Payments: A 50-State Survey (2016), https://members.aamc.org/eweb/upload/Medicaid_Graduate_Medical_Education_Payments--A_50_State_Survey.docx.pdf
[5] Consensus Statement on the Physician Workforce. Paper issued at a joint press conference, February 28, 1997, Washington, D.C.; and Association of Academic Health Centers subsequently testified before Congress regarding the Consensus Statement.
[6] AAMC, 2018 Update: The Complexities of Physician Supply and Demand: Projections from 2016 to 2030, https://aamc-black.global.ssl.fastly.net/production/media/filer_public/85/d7/85d7b689-f417-4ef0-97fb-ecc129836829/aamc_2018_workforce_projections_update_april_11_2018.pdf.
[7] GAO, Health Care Workforce: Comprehensive Planning by HHS Needed to Meet National Needs, December 11, 2015, https://www.gao.gov/assets/680/674137.pdf
[8] GAO, Physician Workforce: HHS Needs Better Information to Comprehensively Evaluate Graduate Medical Education Funding, March 2018, https://www.gao.gov/assets/700/690581.pdf
[9] A May 2017 GAO report, found that there is an uneven distribution of residents across the country, with most concentrating in certain urban centers and the northeast, where GME training programs have historically been located; See GAO, Physician Workforce: Locations and Types of Graduate Training Were Largely Unchanged, and Federal Efforts May Not Be Sufficient to Meet Needs, https://www.gao.gov/assets/690/684946.pdf

RELEVANT AMA POLICIES

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

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 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. 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 and 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. 21. Our AMA will 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. 22. Our AMA will 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 support the value of GME to the nation. 23. Our AMA supports 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. 24. Our AMA will explore various models of all-payer funding for GME, especially as the Institute of Medicine (now a program unit of the National Academy of Medicine) did not examine those options in its 2014 report on GME governance and financing. 25. Our AMA encourages organizations with successful existing models to publicize and share strategies, outcomes and costs. 26. Our AMA encourages insurance payers and foundations to enter into partnerships with state and local agencies as well as academic medical centers and community hospitals seeking to expand GME. 27. Our AMA will develop, along with other interested stakeholders, a national campaign to educate the public on the definition and importance of graduate medical education, student debt and the state of the medical profession today and in the future. 28. Our AMA will collaborate with other stakeholder organizations to evaluate and work to establish consensus regarding the appropriate economic value of resident and fellow services. 29. Our AMA will monitor ongoing pilots and demonstration projects, and explore the feasibility of broader implementation of proposals that show promise as alternative means for funding physician education and training while providing appropriate compensation for residents and fellows. 30. Our AMA will monitor the status of the House Energy and Commerce Committee's response to public comments solicited regarding the 2014 IOM report, Graduate Medical Education That Meets the Nation's Health Needs, as well as results of ongoing studies, including that requested of the GAO, in order to formulate new advocacy strategy for GME funding, and will report back to the House of Delegates regularly on important changes in the landscape of GME funding. 31. Our AMA will advocate to the Centers for Medicare & Medicaid Services for flexibility beyond the current maximum of five years for the Medicare graduate medical education cap-setting deadline for new residency programs in underserved areas and/or economically depressed areas. 32. Our AMA will: (a) encourage all existing and planned allopathic and osteopathic medical schools to thoroughly research match statistics and other career placement metrics when developing career guidance plans; (b) strongly advocate for and work with legislators, private sector partnerships, and existing and planned osteopathic and allopathic medical schools to create and fund graduate medical education (GME) programs that can accommodate the equivalent number of additional medical school graduates consistent with the workforce needs of our nation; and (c) encourage the Liaison

Committee on Medical Education (LCME), the Commission on Osteopathic College Accreditation (COCA), and other accrediting bodies, as part of accreditation of allopathic and osteopathic medical schools, to prospectively and retrospectively monitor medical school graduates' rates of placement into GME as well as GME completion. 33. Our AMA will investigate the status of implementation of AMA Policies D-305.973, "Proposed Revisions to AMA Policy on the Financing of Medical Education Programs" and D-305.967, "The Preservation, Stability and Expansion of Full Funding for Graduate Medical Education" and report back to the House of Delegates with proposed measures to resolve the problems of underfunding, inadequate number of residencies and geographic maldistribution of residencies.
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 Modified: CME Rep. 9, A-15 Appended: CME Rep, 1, I-15 Appended: Res. 902, I-15 Reaffirmed: CME Rep. 3, A-16 Appended: Res. 320, A-16 Appended: CME Rep. 04, A-16 Appended: CME Rep. 05, A-16 Reaffirmation A-16 Appended: Res. 323, A-17 Appended: CME Rep. 03, A-18 Appended: Res. 319, A-18 Reaffirmed in lieu of: Res. 960, I-18

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-310.917, "Securing Funding for Graduate Medical Education"
Our American Medical Association: (1) continues to be vigilant while monitoring pending legislation that may change the financing of medical services (health system reform) and advocate for expanded and broad-based funding for graduate medical education (from federal, state, and commercial entities); (2) continues to advocate for graduate medical education funding that reflects the physician workforce needs of the nation; (3) encourages all funders of GME to adhere to the Accreditation Council for Graduate Medical Education's requirements on restrictive covenants and its principles guiding the relationship between GME, industry and other funding sources, as well as the AMA's Opinion 8.061, and other AMA policy that protects residents and fellows from exploitation, including physicians training in non-ACGME-accredited programs; and (4) encourages entities planning to expand or start GME programs to develop a clear statement of the benefits of their GME activities to facilitate potential funding from appropriate sources given the goals of their programs.

CME Rep. 3, I-09 Modified: CME Rep. 15, A-10 Reaffirmed in lieu of Res. 324, A-12 Reaffirmed: CME Rep. 5, A-13 Appended: CME Rep. 1, I-15

H-305.988, "Cost and Financing of Medical Education and Availability of First-Year Residency Positions"
1. believes that medical schools should further develop an information system based on common definitions to display the costs associated with undergraduate medical education; 2. in studying the financing of medical schools, supports identification of those elements that have implications for the supply of physicians in the future; 3. believes that the primary goal of medical school is to educate students to become physicians and that despite the economies necessary to survive in an era of decreased funding, teaching functions must be maintained even if other commitments need to be reduced; 4. believes that a decrease in student enrollment in medical schools may not result in proportionate reduction of expenditures by the school if quality of education is to be maintained; 5. supports continued improvement of the AMA information system on expenditures of medical students to determine which items are included, and what the ranges of costs are; 6. supports continued study of the relationship between medical student indebtedness and career choice; 7. believes medical schools should avoid counterbalancing reductions in revenues from other sources through tuition and student fee increases that compromise their ability to attract students from diverse backgrounds; 8. supports expansion of the number of affiliations with appropriate hospitals by institutions with accredited residency programs; 9. encourages for profit-hospitals to participate in medical education and training; 10. supports AMA monitoring of trends that may lead to a reduction in compensation and benefits provided to resident physicians; 11. encourages all sponsoring institutions to make financial information available to help residents manage their educational indebtedness; and 12. will advocate that resident and fellow trainees should not be financially responsible for their training.
CME Rep. A, I-83 Reaffirmed: CLRPD Rep. 1, I-93 Res. 313, I-95 Reaffirmed by CME Rep. 13, A-97 Modified: CME Rep. 7, A-05 Modified: CME Rep. 13, A-06 Appended: Res. 321, A-15 Reaffirmed: CME Rep. 05, A-16 Modified: CME Rep. 04, A-16

H-465.988, "Educational Strategies for Meeting Rural Health Physician Shortage"
1. In light of the data available from the current literature as well as ongoing studies being conducted by staff, the AMA recommends that: A. Our AMA encourage medical schools and residency programs to develop educationally sound rural clinical preceptorships and rotations consistent with educational and training requirements, and to provide early and continuing exposure to those programs for medical students and residents. B. Our AMA encourage medical schools to develop educationally sound primary care residencies in smaller communities with the goal of educating and recruiting more rural physicians. C. Our AMA encourage state and county medical societies to support state legislative efforts toward developing scholarship and loan programs for future rural physicians. D. Our AMA encourage state and county medical societies and local medical schools to develop outreach and recruitment programs in rural counties to attract promising high school and college students to medicine and the other health professions. E. Our AMA urge continued federal and state legislative support for funding of Area Health Education Centers (AHECs) for rural and other underserved areas. F. Our AMA continue to support full appropriation for the National Health Service Corps Scholarship Program, with the proviso that medical schools serving states with large rural underserved populations have a priority and significant voice in the selection of recipients for those scholarships. G. Our AMA support full funding of the new federal National Health Service Corps loan repayment program. H. Our AMA encourage continued legislative support of the research studies being conducted by the Rural Health Research Centers funded by the National Office of Rural Health in the Department of Health and Human Services. I. Our AMA continue its research investigation into the impact of educational programs on the supply of rural physicians. J. Our AMA continue to conduct research

and monitor other progress in development of educational strategies for alleviating rural physician shortages. K. Our AMA reaffirm its support for legislation making interest payments on student debt tax deductible. L. Our AMA encourage state and county medical societies to develop programs to enhance work opportunities and social support systems for spouses of rural practitioners. 2. Our AMA will work with state and specialty societies, medical schools, teaching hospitals, the Accreditation Council for Graduate Medical Education (ACGME), the Centers for Medicare and Medicaid Services (CMS) and other interested stakeholders to identify, encourage and incentivize qualified rural physicians to serve as preceptors and volunteer faculty for rural rotations in residency. 3. Our AMA will: (a) work with interested stakeholders to identify strategies to increase residency training opportunities in rural areas with a report back to the House of Delegates; and (b) work with interested stakeholders to formulate an actionable plan of advocacy with the goal of increasing residency training in rural areas.
CME Rep. C, I-90 Reaffirmation A-00 Reaffirmation A-01 Reaffirmation I-01 Reaffirmed: CME Rep. 1, I-08 Reaffirmed: CEJA Rep. 06, A-18 Appended: Res. 956, I-18

H-200.954, "US Physician Shortage"
Our AMA: (1) explicitly recognizes the existing shortage of physicians in many specialties and areas of the US; (2) supports efforts to quantify the geographic maldistribution and physician shortage in many specialties; (3) supports current programs to alleviate the shortages in many specialties and the maldistribution of physicians in the US; (4) encourages medical schools and residency programs to consider developing admissions policies and practices and targeted educational efforts aimed at attracting physicians to practice in underserved areas and to provide care to underserved populations; (5) encourages medical schools and residency programs to continue to provide courses, clerkships, and longitudinal experiences in rural and other underserved areas as a means to support educational program objectives and to influence choice of graduates' practice locations; (6) encourages medical schools to include criteria and processes in admission of medical students that are predictive of graduates' eventual practice in underserved areas and with underserved populations; (7) will continue to advocate for funding from public and private payers for educational programs that provide experiences for medical students in rural and other underserved areas; (8) will continue to advocate for funding from all payers (public and private sector) to increase the number of graduate medical education positions in specialties leading to first certification; (9) will work with other groups to explore additional innovative strategies for funding graduate medical education positions, including positions tied to geographic or specialty need; (10) continues to work with the Association of American Medical Colleges (AAMC) and other relevant groups to monitor the outcomes of the National Resident Matching Program; and (11) continues to work with the AAMC and other relevant groups to develop strategies to address the current and potential shortages in clinical training sites for medical students.
Res. 807, I-03 Reaffirmation I-06 Reaffirmed: CME Rep. 7, A-08 Appended: CME Rep. 4, A-10 Appended: CME Rep. 16, A-10 Reaffirmation: I-12 Reaffirmation A-13 Appended: Res. 922, I-13 Modified: CME Rep. 7, A-14 Reaffirmed: CME Rep. 03, A-16

D-310.977, "National Resident Matching Program Reform"
Our AMA: (1) will work with the National Resident Matching Program to develop and distribute educational programs to better inform applicants about the NRMP matching process; (2) will actively participate in the evaluation of, and provide timely comments about, all proposals to modify the NRMP Match; (3) will request that the NRMP explore the possibility of including the Osteopathic Match in the NRMP Match; (4) will continue to review the NRMP's policies and procedures and make recommendations for improvements as the need arises; (5) will work with the Accreditation Council for Graduate Medical Education and other appropriate agencies to assure that the terms of employment for resident physicians are fair and equitable and reflect the unique and extensive amount of education and experience acquired by physicians; (6) does not support the

current the "All-In" policy for the Main Residency Match to the extent that it eliminates flexibility within the match process; (7) will work with the NRMP, and other residency match programs, in revising Match policy, including the secondary match or scramble process to create more standardized rules for all candidates including application timelines and requirements; (8) will work with the NRMP and other external bodies to develop mechanisms that limit disparities within the residency application process and allow both flexibility and standard rules for applicant; (9) encourages the National Resident Matching Program to study and publish the effects of implementation of the Supplemental Offer and Acceptance Program on the number of residency spots not filled through the Main Residency Match and include stratified analysis by specialty and other relevant areas; (10) will work with the National Resident Matching Program (NRMP) and Accreditation Council for Graduate Medical Education (ACGME) to evaluate the challenges in moving from a time-based education framework toward a competency-based system, including: a) analysis of time-based implications of the ACGME milestones for residency programs; b) the impact on the NRMP and entry into residency programs if medical education programs offer variable time lengths based on acquisition of competencies; c) the impact on financial aid for medical students with variable time lengths of medical education programs; d) the implications for interprofessional education and rewarding teamwork; and e) the implications for residents and students who achieve milestones earlier or later than their peers; (11) will work with the Association of American Medical Colleges (AAMC), American Osteopathic Association (AOA), American Association of Colleges of Osteopathic Medicine (AACOM), and National Resident Matching Program (NRMP) to evaluate the current available data or propose new studies that would help us learn how many students graduating from US medical schools each year do not enter into a US residency program; how many never enter into a US residency program; whether there is disproportionate impact on individuals of minority racial and ethnic groups; and what careers are pursued by those with an MD or DO degree who do not enter residency programs; (12) will work with the AAMC, AOA, AACOM and appropriate licensing boards to study whether US medical school graduates and international medical graduates who do not enter residency programs may be able to serve unmet national health care needs; (13) will work with the AAMC, AOA, AACOM and the NRMP to evaluate the feasibility of a national tracking system for US medical students who do not initially match into a categorical residency program; (14) will discuss with the National Resident Matching Program, Association of American Medical Colleges, American Osteopathic Association, Liaison Committee on Medical Education, Accreditation Council for Graduate Medical Education, and other interested bodies potential pathways for reengagement in medicine following an unsuccessful match and report back on the results of those discussions; (15) encourages the Association of American Medical Colleges to work with U.S. medical schools to identify best practices, including career counseling, used by medical schools to facilitate successful matches for medical school seniors, and reduce the number who do not match; (16) supports the movement toward a unified and standardized residency application and match system for all non-military residencies; and (17) encourages the Educational Commission for Foreign Medical Graduates (ECFMG) and other interested stakeholders to study the personal and financial consequences of ECFMG-certified U.S. IMGs who do not match in the National Resident Matching Program and are therefore unable to get a residency or practice medicine.
CME Rep. 4, A-05 Appended: Res. 330, A-11 Appended: Res. 920, I-11 Appended: Res. 311, A-14 Appended: Res. 312, A-14 Appended: Res. 304, A-15 Appended: CME Rep. 03, A-16 Reaffirmation: A-16 Appended: CME Rep. 06, A-17 Appended: Res. 306, A-17 Modified: Speakers Rep. 01, A-17

REPORT OF THE COUNCIL ON MEDICAL EDUCATION

CME Report 1-A-19

Subject:	Council on Medical Education Sunset Review of 2009 House Policies
Presented by:	Carol Berkowitz, MD, Chair
Referred to:	Reference Committee C (Nicole Riddle, MD, Chair)

AMA Policy G-600.110, "Sunset Mechanism for AMA Policy," is intended to help ensure that the AMA Policy Database is current, coherent, and relevant. By eliminating outmoded, duplicative, and inconsistent policies, the sunset mechanism contributes to the ability of the AMA to communicate and promote its policy positions. It also contributes to the efficiency and effectiveness of House of Delegates deliberations. The current policy reads as follows:

1. As the House of Delegates adopts policies, a maximum ten-year time horizon shall exist. A policy will typically sunset after ten years unless action is taken by the House of Delegates to retain it. Any action of our AMA House that reaffirms or amends an existing policy position shall reset the sunset "clock," making the reaffirmed or amended policy viable for another 10 years.

2. In the implementation and ongoing operation of our AMA policy sunset mechanism, the following procedures shall be followed: (a) Each year, the Speakers shall provide a list of policies that are subject to review under the policy sunset mechanism; (b) Such policies shall be assigned to the appropriate AMA Councils for review; (c) Each AMA council that has been asked to review policies shall develop and submit a report to the House of Delegates identifying policies that are scheduled to sunset; (d) For each policy under review, the reviewing council can recommend one of the following actions: (i) Retain the policy; (ii) Sunset the policy; (iii) Retain part of the policy; or (iv) Reconcile the policy with more recent and like policy; (e) For each recommendation that it makes to retain a policy in any fashion, the reviewing Council shall provide a succinct, but cogent justification; (f) The Speakers shall determine the best way for the House of Delegates to handle the sunset reports.

3. Nothing in this policy shall prohibit a report to the HOD or resolution to sunset a policy earlier than its 10-year horizon if it is no longer relevant, has been superseded by a more current policy, or has been accomplished.

4. The AMA Councils and the House of Delegates should conform to the following guidelines for sunset: (a) when a policy is no longer relevant or necessary; (b) when a policy or directive has been accomplished; or (c) when the policy or directive is part of an established AMA practice that is transparent to the House and codified elsewhere such as the AMA Bylaws or the AMA House of Delegates Reference Manual: Procedures, Policies and Practices.

5. The most recent policy shall be deemed to supersede contradictory past AMA policies.

6. Sunset policies will be retained in the AMA historical archives.

The Council on Medical Education's recommendations on the disposition of the 2009 House policies that were assigned to it are included in the Appendix to this report.

RECOMMENDATION

The Council on Medical Education recommends that the House of Delegates policies listed in the appendix to this report be acted upon in the manner indicated and the remainder of this report be filed. (Directive to Take Action)

Fiscal Note: $1,000.

APPENDIX: RECOMMENDED ACTIONS ON 2009 AND OTHER RELATED HOUSE OF DELEGATES POLICIES

Policy Number, Title, Policy	**Recommended Action**
H-30.983, "Medical Education on Alcoholism and Other Chemical Dependencies"	
The AMA supports (1) taking a leadership role in educating or causing changes in physician education for exposure to early identification, treatment and prevention of alcoholism and other chemical dependencies; and (2) public education efforts in coordination with other interested groups on an ongoing basis. (Res. 67, I-86; Reaffirmed: Sunset Report, I-96; Reaffirmed: CMS Rep. 10, A-99; Reaffirmed: CME Rep. 2, A-09)	Retain; still relevant.
H-200.957, "Proper Notification and Education Regarding Healthcare Professional Shortage Areas by Medicare Carrier"	
Our AMA shall educate member physicians regarding Medicare Part B carriers' responsibility to notify all physicians that if they practice in a Healthcare Professional Shortage Area, they are eligible for incentive payments under Centers for Medicare & Medicaid Services guidelines, and they may be eligible to file amended claims under the incentive payment program retroactively for up to twelve months. (Res. 103, I-99; Reaffirmed: CME Rep. 2, A-09)	Retain; still relevant.
D-200.998, "Physician Workforce Planning and Physician Re-Training"	
Our AMA will consider physician retraining during all its deliberations on physician workforce planning. (Res. 324, A-99; Reaffirmed and Modified: CME Rep. 2, A-09	Retain through incorporation into H-200.955, "Revisions to AMA Policy on the Physician Workforce," as follows: (9) Our AMA will consider physician retraining during all its deliberations on physician workforce planning.
D-225.999, "The Emerging Use of Hospitalists: Implications for Medical Education"	
(1) Our AMA, through its Council on Medical Education and Council on Medical Service, will collect data on the following areas: (a) the emergence of educational opportunities for hospitalist physicians at the residency level, including the curriculum of hospitalist tracks within residency training programs; (b) the availability and content of continuing medical education opportunities for hospitalist physicians; (c) the policies of hospitals and	Sunset; directive has been accomplished through reports from both Councils.

managed care organizations related to the maintenance of hospital privileges for generalist physicians who do not typically care for inpatients; and (d) the quality and costs of care associated with hospitalist practice. (2) Our Council on Medical Education and Council on Medical Service will monitor the evolution of hospitalist programs, with the goal of identifying successful models. (3) Our AMA will encourage dissemination of information about the education implications of the emergence of hospitalism to medical students, resident physicians, and practicing physicians. (CME Rep. 2, A-99; Reaffirmed: CME Rep. 2, A-09)	

H-230.959, "Ultrasound and Biopsy of the Thyroid"

Our AMA adopts the position that only appropriately trained and credentialed physicians (M.D. and D.O.) and appropriately trained and certified ultrasound technologists perform ultrasound examinations of the thyroid and that only appropriately trained and credentialed physicians evaluate and interpret ultrasound examinations and perform ultrasound-guided biopsies of the thyroid. (Sub. Res. 818, I-99; Reaffirmed: CME Rep. 2, A-09)	Retain; still relevant.

H-230.989, "Patient Protection and Clinical Privileges"

Concerning the granting of staff and clinical privileges in hospitals and other health care facilities, the AMA believes: (1) the best interests of patients should be the predominant consideration; (2) the accordance and delineation of privileges should be determined on an individual basis, commensurate with an applicant's education, training, experience, and demonstrated current competence. In implementing these criteria, each facility should formulate and apply reasonable, nondiscriminatory standards for the evaluation of an applicant's credentials, free of anti-competitive intent or purpose; (3) differences among health care practitioners in their clinical privileges are acceptable to the extent that each has a scientific basis. However, the same standards of performance should be applied to limited practitioners who	Retain; still relevant.

offer the kinds of services that can be performed by limited licensed health care practitioners or physicians; and (4) health care facilities that grant privileges to limited licensed practitioners should provide that patients admitted by limited licensed practitioners undergo a prompt medical evaluation by a qualified physician; that patients admitted for inpatient care have a history taken and a comprehensive physical examination performed by a physician who has such privileges; and that each patient's general medical condition is the responsibility of a qualified physician member of the medical staff. (Sub. Res. 36, A-84; Reaffirmed: CME Rep.8, I-93; Reaffirmed: Res. 802, I-99; Reaffirmed: CME Rep. 2, A-09)	

H-255.974, "Preservation of Opportunities for US Graduates and International Medical Graduates Already Legally Present in the US"

In the event of reductions in the resident workforce, the AMA will advocate for a mechanism of resident selection which promotes the maintenance of resident physician training opportunities for all qualified graduates of United States Liaison Committee on Medical Education and American Osteopathic Association accredited institutions; and the AMA adopts the position that it will be an advocate for IMGs already legally present in this country. (Res. 324, A-97; Reaffirmed: CME Rep. 10, A-99; Reaffirmed: CME Rep. 2, A-09)	Sunset; superseded by other policies on IMGs, including H-255.988, "AMA Principles on International Medical Graduates" and D-255.982, "Oppose Discrimination in Residency Selection Based on International Medical Graduate Status." Through the work of its IMG Section and related initiatives, the AMA is a preeminent advocate for IMGs.

D-275.963, "Ensuring Diversity in United States Medical Licensing Examination Exams"

Our AMA will pursue diversity on all United States Medical Licensing Examination test/oversight committees in order to include the perspectives from others, including international medical graduates, to better reflect the diversity of the test takers. (Sub. Res. 306, A-09)	Retain; still relevant.

D-295.319, "Discriminatory Questions on Applications for Medical Licensure"

Our American Medical Association will work with the Federation of State Medical Boards and other appropriate stakeholders to develop model language for medical licensure applications which is non discriminatory and which does not create barriers to appropriate	Sunset; superseded by H-275.970, "Licensure Confidentiality," which reads: "1. The AMA (a) encourages specialty boards, hospitals, and other organizations involved in credentialing, as well as state licensing boards,

diagnosis and treatment of psychiatric disorders, consistent with the responsibility of state medical boards to protect the public health. (Res. 925, I-09)	to take all necessary steps to assure the confidentiality of information contained on application forms for credentials; (b) encourages boards to include in application forms only requests for information that can reasonably be related to medical practice; (c) encourages state licensing boards to exclude from license application forms information that refers to psychoanalysis, counseling, or psychotherapy required or undertaken as part of medical training; (d) encourages state medical societies and specialty societies to join with the AMA in efforts to change statutes and regulations to provide needed confidentiality for information collected by licensing boards; and (e) encourages state licensing boards to require disclosure of physical or mental health conditions only when a physician is suffering from any condition that currently impairs his/her judgment or that would otherwise adversely affect his/her ability to practice medicine in a competent, ethical, and professional manner, or when the physician presents a public health danger. "2. Our AMA will encourage those state medical boards that wish to retain questions about the health of applicants on medical licensing applications to use the language recommended by the Federation of State Medical Boards that reads, "Are you currently suffering from any condition for which you are not being appropriately treated that impairs your judgment or that would otherwise adversely affect your ability to practice medicine in a competent, ethical and professional manner? (Yes/No)."

D-295.325, "Remediation Programs for Physicians"

1. Our AMA supports the efforts of the Federation of State Medical Boards (FSMB) to maintain an accessible national repository on remediation programs that provides information to interested stakeholders and allows the medical profession to study the issue on a national level. 2. Our AMA will collaborate with other appropriate organizations, such as the FSMB and the Association of American Medical Colleges, to study and develop effective methods and tools to assess the effectiveness of	Retain; still relevant.

physician remediation programs, especially the relationship between program outcomes and the quality of patient care. 3. Our AMA supports efforts to remove barriers to assessment programs including cost and accessibility to physicians. 4. Our AMA will partner with the FSMB and state medical licensing boards, hospitals, professional societies and other stakeholders in efforts to support the development of consistent standards and programs for remediating deficits in physician knowledge and skills. 5. Our AMA will ask the Liaison Committee on Medical Education and the Accreditation Council for Graduate Medical Education to develop standards that would encourage medical education programs to engage in early identification and remediation of conditions, such as learning disabilities, that could lead to later knowledge and skill deficits in practicing physicians. (CME Rep. 3, A-09)	

D-295.326, "Recognition of Osteopathic Education and Training"

Our AMA will explore the feasibility of collaborating with other stakeholder organizations and funding agencies to convene leaders in allopathic and osteopathic medicine responsible for undergraduate and graduate medical education, accreditation and certification, to explore opportunities to align educational policies and practices. (CME Rep. 12, A-09)	Sunset; this is being accomplished at the graduate medical education level through the Single GME Accreditation System.

D-295.328, "Promoting Physician Lifelong Learning"

1. Our AMA encourages medical schools and residency programs to explicitly include training in and an evaluation of the following basic skills: (a) the acquisition and appropriate utilization of information in a time-effective manner in the context of the care of actual or simulated patients; (b) the identification of information that is evidence-based, including such things as data quality, appropriate data analysis, and analysis of bias of any kind; (c) the ability to assess one's own learning needs and to create an appropriate learning plan;	Retain; still relevant.

(d) the principles and processes of assessment of practice performance; (e) the ability to engage in reflective practice. 2. Our AMA will work to ensure that faculty members are prepared to teach and to demonstrate the skills of lifelong learning. 3. Our AMA encourages accrediting bodies for undergraduate and graduate medical education to evaluate the performance of educational programs in preparing learners in the skills of lifelong learning. 4. Our AMA will monitor the utilization and evolution of the new methods of continuing physician professional development, such as performance improvement and internet point-of-care learning, and work to ensure that the methods are used in ways that are educationally valid and verifiable. 5. Our AMA will continue to study how to make participation in continuing education more efficient and less costly for physicians. (CME Rep. 10, A-09)	

D-295.329, "Communication and Clinical Teaching Curricula"

Our AMA will: 1. encourage the Liaison Committee on Medical Education to continue to enforce accreditation standards requiring that faculty members and resident physicians are prepared for and evaluated on their teaching effectiveness; 2. encourage the Accreditation Council for Graduate Medical Education to create institutional-level standards related to assuring the quality of faculty teaching; 3. encourage medical schools and institutions sponsoring graduate medical education programs to offer faculty development for faculty and resident physicians in time-efficient modalities, such as online programs, and/or to support faculty and resident participation in off-site programs; 4. encourage medical educators to develop and utilize valid and reliable measures for teaching effectiveness; and 5. encourage medical schools to recognize participation in faculty development for purposes of faculty retention and promotion. (CME Rep. 9, A-09)	Retain; still relevant.

D-295.330, "Update on the Uses of Simulation in Medical Education"

Our AMA will: 1. continue to advocate for additional funding for research in curriculum development, pedagogy, and outcomes to further assess the effectiveness of simulation and to implement effective approaches to the use of simulation in both teaching and assessment; 2. continue to work with and review, at five-year intervals, the accreditation requirements of the Liaison Committee on Medical Education (LCME), the Accreditation Council for Graduate Medical Education (ACGME), and the Accreditation Council for Continuing Medical Education (ACCME) to assure that program requirements reflect appropriate use and assessment of simulation in education programs; 3. encourage medical education institutions that do not have accessible resources for simulation-based teaching to use the resources available at off-site simulation centers, such as online simulated assessment tools and simulated program development assistance; 4. monitor the use of simulation in high-stakes examinations administered for licensure and certification as the use of new simulation technology expands; 5. further evaluate the appropriate use of simulation in interprofessional education and clinical team building; and 6. work with the LCME, the ACGME, and other stakeholder organizations and institutions to further identify appropriate uses for simulation resources in the medical curriculum. (CME Rep. 8, A-09)	Retain; still relevant.

H-295.867, "Expanding the Visiting Students Application Service for Visiting Student Electives in the Fourth Year"

1. Our American Medical Association strongly encourages the Association of American Medical Colleges (AAMC) to expand eligibility for the Visiting Students Application Service (VSAS) to medical students from Commission on Osteopathic College Accreditation (COCA)-accredited medical schools. 2. Our AMA supports and encourages the AAMC in its efforts to increase the number of members and non-member programs in the VSAS, such as medical schools accredited by	Retain; still relevant.

COCA and teaching institutions not affiliated with a medical school. 3. Our AMA encourages the AAMC to ensure that member institutions that previously accepted both allopathic and osteopathic applications for fourth year clerkships prior to VSAS implementation continue to have a mechanism for accepting such applications of osteopathic medical students. (Res. 910, I-09)	

H-295.887, "Clinical Skills Assessment During Medical School"

Our AMA encourages medical schools that do not already do so to implement valid and reliable methods to evaluate medical students' clinical skills. (CMS Rep. 7, I-99; Reaffirmed: CME Rep. 2, A-09)	Sunset; superseded by D-295.988, "Clinical Skills Assessment During Medical School," which reads in part: "1. Our AMA will encourage its representatives to the Liaison Committee on Medical Education (LCME) to ask the LCME to determine and disseminate to medical schools a description of what constitutes appropriate compliance with the accreditation standard that schools should 'develop a system of assessment' to assure that students have acquired and can demonstrate core clinical skills… "3. Our AMA will work to … include active participation by faculty leaders and assessment experts from U.S. medical schools, as they work to develop new and improved methods of assessing medical student competence for advancement into residency. "4. Our AMA is committed to assuring that all medical school graduates entering graduate medical education programs have demonstrated competence in clinical skills. "5. Our AMA will continue to work with appropriate stakeholders to assure the processes for assessing clinical skills are evidence-based and most efficiently use the time and financial resources of those being assessed."

H-295.889, "Color Blindness"

Our AMA will encourage medical schools to be aware of students with color blindness and its effect on their medical studies. (Sub. Res, 303, A-99; Reaffirmed: CME Rep. 2, A-09)	Retain; still relevant.

H-295.890, "Medical Education and Training in Women's Health"

Our AMA: (1) encourages the coordination and synthesis of the knowledge, skills, and attitudinal objectives related to women's health/gender-based biology that have been developed for use in the medical school curriculum. Medical schools should include attention to women's health throughout the basic science and clinical phases of the curriculum; (2) does not support the designation of women's health as a distinct new specialty; (3) that each specialty should define objectives for residency training in women's health, based on the nature of practice and the characteristics of the patient population served; (4) that surveys of undergraduate and graduate medical education, conducted by the AMA and other groups, should periodically collect data on the inclusion of women's health in medical school and residency training; (5) encourages the development of a curriculum inventory and database in women's health for use by medical schools and residency programs; (6) encourages physicians to include continuing education in women's health/gender based biology as part of their continuing professional development; and (7) encourages its representatives to the Liaison Committee on Medical Education, the Accreditation Council for Graduate Medical Education, and the various Residency Review Committees to promote attention to women's health in accreditation standards. (Jt. Rep. CME and CSA, A-99; Reaffirmed: CME Rep. 2, A-09)	Retain; still relevant.

H-295.919, "Advanced Cardiac Life Support Training"

Our AMA: (1) strongly supports the teaching of advanced cardiac life support and basic life support beginning in medical school and continuing during residency training; and (2) encourages medical schools to include the following areas related to airway management as part of the required curriculum: (a) airway anatomy and function; (b) basic life support and advanced cardiac life support, and (c) airway management and intubation in the unconscious patient. (Sub. Res. 309, A-95; Reaffirmed and Appended: CME Rep. 3, I-99; Reaffirmed and Modified: CME Rep. 2, A-09)	Sunset; this has become well established in medical education and practice.

H-295.949, "Encouraging Community Based Medical Education"

Our AMA recognizes and acknowledges the vital role of practicing physicians in community hospitals in medical student and resident teaching. (Res. 44, A-91; Modified: Sunset Report, I-01; Reaffirmed: CME Rep. 9, A-09)	Retain through incorporation into H-295.916, "Improving Medical School/Community Practice," as follows: 1. Our AMA recognizes and acknowledges the vital role of practicing physicians in community hospitals in medical student and resident teaching. ~~1~~2. Medical schools should be encouraged to include community physicians who serve as volunteer faculty in medical school activities and in committees and other decision-making bodies related to the student educational program, such as the curriculum committee and the admission committee, and in search committees for medical school deans and department chairs. ~~2~~3. County/state medical societies should be encouraged to include medical school administrators and faculty members in committees and other society activities, and to consider creating a seat for medical school deans in the state society house of delegates. ~~3~~4. There should be mechanisms established at local or state levels to address tensions arising between the academic and practice communities, such as problems associated with the granting of faculty appointment or hospital staff privileges.

	4<u>5</u>. Medical schools and other academic continuing medical education providers should work with community physicians to develop continuing education programs that address local needs. <s>5</s><u>6</u>. Community physician groups and schools of medicine should be encouraged to communicate during the initial stages of discussions about the formation of patient care networks.

D-295.983, "Fostering Professionalism During Medical School and Residency Training"

(1) Our AMA, in consultation with other relevant medical organizations and associations, will work to develop a framework for fostering professionalism during medical school and residency training. This planning effort should include the following elements: (a) Synthesize existing goals and outcomes for professionalism into a practice-based educational framework, such as provided by the AMA's Principles of Medical Ethics. (b) Examine and suggest revisions to the content of the medical curriculum, based on the desired goals and outcomes for teaching professionalism. (c) Identify methods for teaching professionalism and those changes in the educational environment, including the use of role models and mentoring, which would support trainees? acquisition of professionalism. (d) Create means to incorporate ongoing collection of feedback from trainees about factors that support and inhibit their development of professionalism. (2) Our AMA, along with other interested groups, will continue to study the clinical training environment to identify the best methods and practices used by medical schools and residency programs to fostering the development of professionalism. (CME Rep. 3, A-01; Reaffirmation I-09)	Retain; still relevant, with editorial change as shown below: (c) Identify methods for teaching professionalism and those changes in the educational environment, including the use of role models and mentoring, which would support trainees<s>?</s><u>'</u> acquisition of professionalism.

D-295.992, "Development of Courses to Prepare Medical Students and Residents for the Political, Legal and Socioeconomic Aspects of Practice and Physician Advocacy"

Our AMA will assist local and state medical societies to develop education programs on the political, legal, and socioeconomic aspects of medical practice and physician advocacy, to be offered to medical students and physicians in residency training throughout the country to supplement their clinical education and prepare them for practice. (Res. 322, A-99; Reaffirmed: CME Rep. 2, A-09	Sunset; superseded by the following policies, as excerpted below. H-295.961, "Medicolegal, Political, Ethical and Economic Medical School Course" "The AMA urge every medical school and residency program to teach the legal, political, ethical and economic issues which will affect physicians. (2) The AMA will work with state and county medical societies to identify and provide speakers, information sources, etc., to assist with the courses..." H-295.953, "Medical Student, Resident and Fellow Legislative Awareness" "1. The AMA strongly encourages the state medical associations to work in conjunction with medical schools to implement programs to educate medical students concerning legislative issues facing physicians and medical students. "2. Our AMA will advocate that political science classes which facilitate understanding of the legislative process be offered as an elective option in the medical school curriculum. "3. Our AMA will establish health policy and advocacy elective rotations based in Washington, DC for medical students, residents, and fellows. "4. Our AMA will support and encourage institutional, state, and specialty organizations to offer health policy and advocacy opportunities for medical students, residents, and fellows." H-295.977, "Socioeconomic Education for Medical Students" "1. The AMA favors (a) continued monitoring of U.S. medical school curricula and (b) providing encouragement and assistance to medical school administrators to include or

	maintain material on health care economics in medical school curricula. "2. Our AMA will advocate that the medical school curriculum include an optional course on coding and billing structure, RBRVS, RUC, CPT and ICD-9." H-295.924, "Future Directions for Socioeconomic Education" "The AMA: (1) asks medical schools and residencies to encourage that basic content related to the structure and financing of the current health care system, including the organization of health care delivery, modes of practice, practice settings, cost effective use of diagnostic and treatment services, practice management, risk management, and utilization review/quality assurance, is included in the curriculum; (2) asks medical schools to ensure that content related to the environment and economics of medical practice in fee-for-service, managed care and other financing systems is presented in didactic sessions and reinforced during clinical experiences, in both inpatient and ambulatory care settings, at educationally appropriate times during undergraduate and graduate medical education; and (3) will encourage representatives to the Liaison Committee on Medical Education (LCME) to ensure that survey teams pay close attention during the accreditation process to the degree to which 'socioeconomic' subjects are covered in the medical curriculum."

D-295.996, "Update on Development of Branch Campuses of International Medical Schools"

Our AMA will join with the Association of American Medical Colleges in continuing to support the process of voluntary accreditation of medical education programs. (BOT Rep. 25, A-99; Reaffirmed and Modified: CME Rep. 2, A-09	Retain, still relevant.

D-300.981, "Proposed Fee Increase by the Accreditation Council for Continuing Medical Education"

Our AMA will strongly urge the Accreditation Council for Continuing Medical Education (ACCME) to reconsider the proposed fee increase and, if the ACCME refuses to reconsider the proposed fee increase, our AMA will investigate and recommend ways by which physicians may receive appropriate, accredited continuing medical education other than through ACCME-accredited activities. (Res. 312, A-09)	Retain, still relevant; also, will be covered in more detail in a planned Council on Medical Education report.

D-305.963, "Securing Medicare GME Funding for Research and Ambulatory Non-Hospital Based Outside Rotations During Residency"

Our AMA will: 1. Advocate for the Centers for Medicare and Medicaid Services (CMS) (both federal Medicare and federal/state Medicaid) funding for the time residents and fellows spend in research, didactic activities, and extramural educational activities required for the Accreditation Council for Graduate Medical Education (ACGME) accreditation during their training. 2. Continue to work with organizations such as the Association of American Medical Colleges (AAMC) and the Council on Graduate Medical Education (COGME), to make recommendations to change current Graduate Medical Education (GME) funding regulations during residency training, which currently limit funding for research, extramural educational opportunities, and flexible GME training programs and venues. 3. Monitor any public and/or private efforts to change the financing of medical services (health system reform) so as to advocate for adequate and appropriate funding of GME. 4. Advocate for funding for training physician researchers from sources in addition to CMS such as the National Institutes of Health, the Agency for Healthcare Research and Quality, the Veterans Administration, and other agencies. (CME Rep. 4, I-08 Reaffirmed: CME Rep. 3, I-09 Modified: CCB/CLRPD Rep. 2, A-14)	Sunset; already accomplished, or superseded by other AMA policy. Items 1 and 2 have been addressed: For direct graduate medical education funds, CMS will count research time if it's part of the ACGME-accredited program; for indirect GME, CMS will count research time if it's associated with the treatment or diagnosis of a particular patient. The brochure "Medicare Payments for Graduate Medical Education: What Every Medical Student, Resident, and Advisor Needs to Know," from the Association of American Medical Colleges," provides additional information on this topic: "16. What about the time I spend doing research? "For DGME payments, a hospital may count the time a resident spends performing research, including bench research, as long as the research takes place in the hospital and is part of an approved training program. For IME payments, a hospital may only count the time a resident spends performing clinical research that is associated with the treatment or diagnosis of a particular patient. If you were to take a year away from your residency training specifically to conduct research not required by your residency program, the research year would not count toward your IRP. For example, if you had completed three years of a general surgery program (a program with a five-year IRP), and you stepped away from the program for one year to do research not

	required by your program, you would still have two years remaining on your IRP when you returned to training after your research year." Item 3 is superseded by more comprehensive AMA policy, including D-305.967, "The Preservation, Stability and Expansion of Full Funding for Graduate Medical Education" and H-310.917, "Securing Funding for Graduate Medical Education." Item 4 is superseded by H-460.930, "Importance of Clinical Research," which reads in part: "(2) Our AMA continues to advocate vigorously for a stable, continuing base of funding and support for all aspects of clinical research within the research programs of all relevant federal agencies, including the National Institutes of Health, the Agency for Healthcare Research and Quality, the Centers for Medicare & Medicaid Services, the Department of Veterans Affairs and the Department of Defense."

D-305.996, "Coding for Services Involving Teaching Activity"

Our AMA will continue its efforts to develop the next generation of CPT coding, with attention to the coding needs of teaching physicians. (BOT Rep. 7, A-99; Reaffirmed and Modified: CME Rep. 2, A-09	Retain; still relevant.

D-305.997, "Training of Physicians Under Managed Care"

Our AMA will monitor ongoing legislative initiatives and support specific language that would preserve the opportunities for medical students and resident physicians to participate in the care of patients under the supervision of the responsible attending staff. (CME Rep. 4, A-99; Reaffirmed and Modified: CME Rep. 2, A-09	Sunset; superseded by H-295.995, "Recommendations for Future Directions for Medical Education," which reads in part: "(36) Our AMA will strongly advocate for the rights of medical students, residents, and fellows to have physician-led (MD or DO as defined by the AMA) clinical training, supervision, and evaluation while recognizing the contribution of non-physicians to medical education." Also superseded by H-285.974, "Residents Working with Managed Care Programs," which reads: "The AMA encourages managed care plans to allow residents to care for patients under faculty supervision in the inpatient and outpatient setting."

H-310.930, "Attending Physician Supervision of Night-Float Rotations"

Our AMA supports hospitals and residency programs including those utilizing a night-float system, continuing to assure that there is rapid access to appropriately qualified attending physicians for trainee supervision and the provision of the best quality of patient care. (Res. 320, A-99; Reaffirmed: CME Rep. 2, A-09)	Sunset; superseded by the following policies: H-310.929, "Principles for Graduate Medical Education" "(12) SUPERVISION OF RESIDENT PHYSICIANS. Program directors must supervise and evaluate the clinical performance of resident physicians. The policies of the sponsoring institution, as enforced by the program director, and specified in the ACGME Institutional Requirements and related accreditation documents, must ensure that the clinical activities of each resident physician are supervised to a degree that reflects the ability of the resident physician and the level of responsibility for the care of patients that may be safely delegated to the resident. The sponsoring institution's GME Committee must monitor programs' supervision of residents and ensure that supervision is consistent with: (A) Provision of safe and effective patient care; (B) Educational needs of residents; (C) Progressive responsibility appropriate to residents' level of education, competence, and experience; and (D) Other applicable Common and specialty/subspecialty specific Program Requirements. The program director, in cooperation with the institution, is responsible for maintaining work schedules for each resident based on the intensity and variability of assignments in conformity with ACGME Review Committee recommendations, and in compliance with the ACGME clinical and educational work hour standards. 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. Each patient's attending physician must decide, within guidelines established by the program director, the extent to which responsibility may be delegated to the resident, and the appropriate degree of supervision of the resident's participation in the care of the patient. The

	attending physician, or designate, must be available to the resident for consultation at all times." H-310.907, "Resident/Fellow Clinical and Educational Work Hours" "6. Our AMA recognizes the ACGME for its work in ensuring an appropriate balance between resident education and patient safety, and encourages the ACGME to continue to: … develop standards to ensure that appropriate education and supervision are maintained, whether the setting is in-house or at-home." "o) The general public should be made aware of the many contributions of resident/fellow physicians to high-quality patient care and the importance of trainees' realizing their limits (under proper supervision) so that they will be able to competently and independently practice under real-world medical situations." In addition, the following from the AMA *Code of Medical Ethics* is relevant to rescission of this policy: Opinion 9.2.2, "Resident & Fellow Physicians' Involvement in Patient Care" "Physicians involved in training residents and fellows should … (f) Provide residents and fellows with appropriate faculty supervision and availability of faculty consultants, and with graduated responsibility relative to level of training and expertise."

H-310.945, "Graduate Medical Education Faculty Evaluations"

The AMA recommends that evaluations of residency program faculty should be done in a confidential manner, at least annually, and the areas evaluated should include teaching ability, clinical knowledge, scholarly contributions, attitudes, interpersonal skills, communication ability and commitment. Residency program directors should provide faculty members with a written summary of the evaluations. (CME Rep. 7, I-93; Reaffirmed and Modified: CME Rep. 2, A-05; Reaffirmed: CME Rep. 9, A-09)	Retain; still relevant.

D-310.956, "Transfer of Care for Resident and Fellow Physicians in Training"

Our AMA: (1) working with other organizations and stakeholders, will identify best practices including the presence, quality, and utilization of computerized systems for transfer of care in training programs in all specialties; (2) will encourage the ACGME to add to the Institutional Requirements a requirement that GME training institutions ensure that trainees in all specialties are provided with an effective, systematic approach for handoffs of clinical information and transfer of care between trainees within their institution; and (3) will advocate for the use of federal dollars in existing Health Information Technology (HIT) initiatives to sponsor systems that enable transfers of care that are integral to any well-functioning electronic medical record. (Res. 329, A-09)	Sunset, for reasons stipulated below. Item 1 is superseded by H-310.907, "Resident/Fellow Clinical and Educational Work Hours," which reads in part: "3. Our AMA encourages publication and supports dissemination of studies in peer-reviewed publications and educational sessions about all aspects of clinical and educational work hours, to include such topics as extended work shifts, handoffs..." Item 2 is already reflected in ACGME Institutional Requirements (effective July 1, 2018): *III.B.3. Transitions of Care: The Sponsoring Institution must:* *III.B.3.a) facilitate professional development for core faculty members and residents/fellows regarding effective transitions of care; and, (Core)* *III.B.3.b) in partnership with its ACGME-accredited program(s), ensure and monitor effective, structured patient hand-over processes to facilitate continuity of care and patient safety at participating sites. (Core)* Item 3 has been accomplished. HITECH (Health Information Technology for Economic and Clinical Health) Act funding for health information exchanges (HIEs) has run out, the Meaningful Use program is over, and the AMA successfully advocated to the Centers for Medicare & Medicaid Services (CMS) to focus its Performance Improvement efforts on interoperability. In fact, the newest HIE measures from CMS are on closing the referral loop—a core function in care transfer. Finally, the AMA has a significant number of other policies on broader advocacy efforts for interoperability.

D-310.957, "Resident and Fellow Benefit Equity During Research Assignments"

1. Our AMA will urge the Accreditation Council for Graduate Medical Education to require accredited sponsoring residency and fellowship training programs to continue to provide comparable benefits to resident and fellow physicians engaged in research activities that are required by either their sponsoring residency and fellowship training programs or residency review committees as if it were full-time clinical service. 2. Our AMA will collect data on resident and fellow physician benefits including resident and fellow physicians engaged in research activities. 3. Our AMA will, through the AMA Resident and Fellow Section, continue to work with residents and fellows and support training of biomedical scientists and health care researchers. 4. Our AMA will advocate that the Centers for Medicare & Medicaid Services include in an expanded cap the FEC count for GME payment formulas the time that resident and fellow physicians spend in research and other scholarly activities that is required by the ACGME. (CME Rep. 14, A-09)	Sunset, as described below. Item 1 would be anticompetitive, and unenforceable, based on an analogous ACGME requirement from the 1990s, which stated that all clinical residents at the same level be paid the same amount. This 1990s requirement was ruled anticompetitive by the U.S. Department of Justice at that time; item 1 would in all likelihood meet with the same decision. Despite research by AMA staff, it is unclear whether item 2 was accomplished; that said, it does not seem likely that it can be (or would be) accomplished in the future. Item 3 is *a priori* the role of the Resident and Fellow Section. Item 4 has been addressed: For direct graduate medical education funds, CMS will count research time if it's part of the ACGME-accredited program; for indirect GME, CMS will count research time if it's associated with the treatment or diagnosis of a particular patient. The brochure "Medicare Payments for Graduate Medical Education: What Every Medical Student, Resident, and Advisor Needs to Know," from the Association of American Medical Colleges, provides additional information on this topic: "16. What about the time I spend doing research? "For DGME payments, a hospital may count the time a resident spends performing research, including bench research, as long as the research takes place in the hospital and is part of an approved training program. For IME payments, a hospital may only count the time a resident spends performing clinical research that is associated with the treatment or diagnosis of a particular patient. If you were to take a year away from your residency training specifically to conduct research not required by your residency program, the research year would not count toward your IRP. For example, if you had completed three years of a general surgery program (a program with a

	five-year IRP), and you stepped away from the program for one year to do research not required by your program, you would still have two years remaining on your IRP when you returned to training after your research year."

D-310.960, "Timely Issuance of Social Security Number"

Our AMA will work with the United States government to provide a social security number in a timely fashion to foreign physicians with a work-related visa, upon lawful entry to the United States, for any purposes. (Res. 304, A-09)	Retain; still relevant.

H-350.968, "Medical School Faculty Diversity"

Our AMA encourages increased recruitment and retention of faculty members from underrepresented minority groups as part of efforts to increase the number of individuals from underrepresented minority groups entering and graduating from US medical schools. (CME Rep. 8, I-99; Reaffirmed: CME Rep. 2, A-09)	Sunset; superseded by D-200.985, "Strategies for Enhancing Diversity in the Physician Workforce," which reads in part (relevant portions in italics): "1. Our AMA, independently and in collaboration with other groups such as the Association of American Medical Colleges (AAMC), will actively work and advocate for funding at the federal and state levels and in the private sector to support the following: a. Pipeline programs to prepare and motivate members of underrepresented groups to enter medical school; b. Diversity or minority affairs offices at medical schools; c. Financial aid programs for students from groups that are underrepresented in medicine; and *d. Financial support programs to recruit and develop faculty members from underrepresented groups."* *"4. Our AMA will encourage the Liaison Committee on Medical Education to assure that medical schools demonstrate compliance with its requirements for a diverse student body and faculty."*

REPORT 2 OF THE COUNCIL ON MEDICAL EDUCATION (A-19)
Update on Maintenance of Certification and Osteopathic Continuous Certification
(Resolution 316-A-18)
(Reference Committee C)

EXECUTIVE SUMMARY

The Council on Medical Education has monitored Maintenance of Certification (MOC) and Osteopathic Continuous Certification (OCC) during the last year. This annual report, mandated by American Medical Association (AMA) Policy D-275.954, "Maintenance of Certification and Osteopathic Continuous Certification," provides an update on some of the changes that have occurred as a result of AMA efforts with the American Board of Medical Specialties (ABMS), ABMS member boards, and key stakeholders to improve the continuing board certification process.

In December 2018, the Council provided comments to strengthen the draft recommendations of the Continuing Board Certification: Vision for the Future Commission, established by the ABMS. In February 2019, the Commission completed its final report, which includes 14 recommendations intended to modernize continuing board certification so that it is meaningful, contemporary, and a relevant professional development activity for diplomates who are striving to be up-to-date in their specialty. The ABMS and ABMS member boards, in collaboration with professional organizations and other stakeholders, will prioritize these recommendations and develop the strategies and infrastructure to implement them. A summary of the recommendations is provided in this report.

This report also highlights initiatives that are underway to improve MOC:

- Twenty-three ABMS member boards have moved away from the secure, high-stakes exam, and more than three-fourths of the boards have completed, or will soon be launching, assessment pilots that combine adult learning principles with state-of-the-art technology, enabling delivery of assessments that are a more relevant, less onerous, and cost-efficient process for physicians. Appendix F in this report summarizes these new models.
- The ABMS member boards have broadened the range of acceptable activities that meet the Improvement in Medical Practice (IMP) requirements, including those offered at the physician's institution and/or individual practices, to address physician concerns about the relevance, cost, and burden associated with fulfilling the IMP requirements. Appendix F includes a summary of these initiatives.
- New studies published during the last year describe how new assessment models and IMP activities have resulted in improved quality and patient care and physician satisfaction.

Updates on the following activities are also included in this report:

- AMA participation in meetings and conferences to improve the MOC process (pages 4-5)
- New innovative continuing medical education models (pages 5-6)
- Alternatives to the secure, high-stakes examination (Part III) (pages 6-7)
- Improvement in medical practice (Part IV) (pages 7-8)
- The ABMS Multi-Specialty Portfolio Program (page 8)
- Emerging data and literature regarding the value of MOC (pages 8-12)
- Osteopathic Continuous Certification (pages 12-13)

The Council on Medical Education is committed to ensuring that continuing board certification supports physicians' ongoing learning and practice improvement and can assure the public that physicians are providing high-quality patient care. The Council will continue to identify and suggest improvements to continuing certification programs.

REPORT OF THE COUNCIL ON MEDICAL EDUCATION

CME Report 2-A-19

Subject:	Update on Maintenance of Certification and Osteopathic Continuous Certification (Resolution 316-A-18)
Presented by:	Carol Berkowitz, MD, Chair
Referred to:	Reference Committee C (Nicole Riddle, MD, Chair)

Resolution 316-A-18, "End Part IV IMP Requirement for ABMS," introduced by Michigan and referred by the American Medical Association (AMA) House of Delegates (HOD), asks the AMA to call for an end to the mandatory American Board of Medical Specialties "Part 4 Improvement in Medical Practice" maintenance of certification requirement.

Policy D-275.954 (39), "Maintenance of Certification and Osteopathic Continuous Certification," asks the AMA to continue studying the certifying bodies that compete with the American Board of Medical Specialties and provide an update in the Council on Medical Education's annual report on maintenance of certification at A-19.

Policy D-275.954 (1), "Maintenance of Certification and Osteopathic Continuous Certification," asks that the AMA continue to monitor the evolution of Maintenance of Certification (MOC) and Osteopathic Continuous Certification (OCC), continue its active engagement in discussions regarding their implementation, encourage specialty boards to investigate and/or establish alternative approaches for MOC, and prepare a yearly report to the HOD regarding the MOC and OCC processes.

BACKGROUND

During the 2018 Annual Meeting, testimony before Reference Committee C was mixed regarding Resolution 316-A-18. Testimony noted the lack of relevance, burden, and cost of the Maintenance of Certification (MOC) Part IV process in addition to the other requirements physicians are required to fulfill for meaningful use, the Medicare Access and CHIP Reauthorization Act (MACRA), etc. However, it was also noted that the broadening range of acceptable activities that meet the Improvement in Medical Practice (MOC Part IV) component has made this activity acceptable for other national value-based reporting requirements and continuing certification programs. It was further noted that the boards are implementing a number of activities related to registries, systems-based practice, and practice audits to show improvement in practice. The ABMS Multi-Specialty Portfolio Program™ offers health care organizations a way to support physician involvement in their institution's quality and performance improvement initiatives by offering credit for the Improvement in Medical Practice component of the ABMS Program for MOC. Due to the Council on Medical Education's ongoing work with the ABMS and the ABMS member boards to improve this process, the HOD referred this item for further study as part of this annual report.

CONTINUING BOARD CERTIFICATION: VISION FOR THE FUTURE COMMISSION

In early 2018, the Continuing Board Certification: Vision for the Future Commission was established by the ABMS and charged with reviewing continuing certification within the current context of the medical profession. The Commission was also asked to address key issues currently facing the ABMS member boards and diplomates. The Commission was composed of 27 individuals who represented diverse stakeholders including practicing physicians; health care leadership; academic medicine; group medical practices; state and national medical associations; ABMS Board executives; specialty societies; and health advocate groups who represented patients, families, and the public at large.

In March 2018, shortly after the Commission was established, the Council on Medical Education co-convened a conference with the ABMS, ABMS member boards, and key stakeholders to discuss how continuing board certification can meet the needs of diverse stakeholders, including physicians, hospitals, patients, and the public, and to develop recommendations for the Commission. Meeting attendees explored approaches for maximizing assessment, learning, and improvement. The meeting also highlighted the importance of addressing physicians' needs and expectations while at the same time recognizing the value of continuous maintenance and improvement of competence. While no effort was made to develop consensus on any specific issue, the discussion reflected a broad range of attitudes and opinions, and nine emergent themes about continuing certification were identified that suggested the process should be affirmative, affordable, aligned, appropriately managed, collaborative, innovative, meaningful, patient-focused, and supportive.

Throughout 2018, the Commission conducted a national survey, heard public testimony from diplomates and key stakeholders, and held Commission meetings to review the information collected and presented. The Commission used this knowledge base to establish a conceptual framework and guiding principles that were then used to draft its report and recommendations. The recommendations highlighted the need for any assessment framework to identify gaps in knowledge and skills that are relevant to the physician's practice in order to foster lifelong learning and assist physicians in remaining current with new knowledge and advances in medicine. In its recommendations, the Commission emphasized that improving practice and quality of care is an important goal of the continuing certification process, which means assessing practice data and gaps in quality of care. The Commission recommended new program models for continuing board certification that are responsive to the needs of those who rely on the system, and that are relevant, meaningful, and of value to those who hold the credential. A number of recommendations relate to the process of creating a better system of continuing certification and to the ways that continuing certification status is used by health systems and payers. The Commission stressed the importance of collaboration with professional organizations in the redesign of MOC and noted that any framework for continuing certification must be assessed by independent research to integrate continuous quality improvement (QI) into the continuing board certification process. The Commission's draft report and recommendations were widely circulated for comments.

In December 2018, the Council on Medical Education reviewed the Commission's draft report and recommendations and provided comments back to the Commission. The Council praised the Commission for producing a thorough report and for acknowledging long-standing physician frustrations, such as the concern that the benefits of the continuing certification process traditionally have not been worth the time or financial investment required for participation. At the same time, however, the Council strongly objected to some of the draft recommendations and other portions of the report (Appendix A).

On February 12, 2019, the Commission released its final report, which included a total of 14 recommendations (https://visioninitiative.org/commission/final-report/). Of these, the Commission emphasized that some must be implemented by the ABMS and its member boards in the short term (one to two years) or within an intermediate time frame (e.g., less than five years). The Commission also noted that one recommendation is foundational and three are aspirational.

Most of the Council's concerns were addressed in the final report (Appendix B). For example, the final recommendations included stronger language regarding the secure, high-stakes examination and the acceptance of quality data already being reported by individual physicians. The final recommendations also note that the ABMS must demonstrate the value, meaning, and purpose of continuing certification, but that it should not be the only criterion used for credentialing and privileging decisions. In addition, detailed financial transparency regarding fiscal responsibility toward diplomates was addressed. As suggested by the Council, the final recommendations also emphasize the need for a more consistent process and requirements for continuing certification among the ABMS member boards.

On March 12, 2019, after reviewing the final recommendations of the Commission, the ABMS Board of Directors announced that all 24 member boards had accepted the Commission's recommendations. To support implementation, the ABMS Board of Directors also announced the establishment of the Achieving the Vision for Continuing Board Certification Oversight Committee (https://www.abms.org/media/194984/abms-announces-plan-to-implement-recommendations-from-the-continuing-board-certification-vision-for-the-future-commission.pdf). This committee will seek guidance from the ABMS' new Stakeholder Council and various stakeholders in the continuing certification process throughout the implementation phase. Possible implementation actions include: considering how the standards for continuing certification should be revised to reflect a more integrated framework, additional flexible approaches to knowledge assessment, feedback requirements from boards to diplomates, consistency in requirements and core processes, defining categories of consequential decisions, pathways for lifetime certificate holders to engage with continuing certification, consistency regarding professional standing, and providing a "wide door" for QI/performance improvement activities that satisfy continuing certification requirements. Organizational standards such as governance composition and financial transparency will also be reviewed.

The ABMS has attained the agreement of all member boards to commit to longitudinal or other formative assessment strategies and to offer alternatives to the highly secure, point-in-time examinations of knowledge. Other implementation actions may include developing and defining best practices for diplomate engagement; developing policies regarding diplomates with multiple certificates; allocating funds and/or allowing access to data to support external research; displaying diplomate participation on public websites; and communicating and educating hospitals, health systems, payers, and other health care organizations about the appropriate use of the continuing board certification certificate. The ABMS will involve external stakeholders and form additional task forces to address remediation pathways, assessment of professionalism, QI and advancing practice, and data and information sharing. A meeting of the ABMS/Council of Medical Specialty Societies joint board leadership will also be established to ensure full specialty society engagement in building the road map defined by the Commission report, especially with regard to the role of continuing certification in advancing clinical practice.

The Commission's final recommendations align with HOD policies and directives (Appendix C). Thus, it will be important for the Council on Medical Education to continue to work with the ABMS, ABMS Committee on Continuing Certification (3C), and ABMS Stakeholder Council to

pursue opportunities to implement the Commission's recommendations and to ensure that the continuing certification process is meaningful and relevant for physicians and patients.

MAINTENANCE OF CERTIFICATION (MOC): AN UPDATE

The AMA Council on Medical Education and the HOD have carried out extensive and sustained work in developing policy on MOC and OCC (Appendix D), including working with the ABMS and the AOA to provide physician feedback to improve the MOC and OCC processes, informing our members about progress on MOC and OCC through annual reports to the HOD, and developing strategies to address the concerns about the MOC and OCC processes raised by physicians. The Council has prepared reports covering MOC and OCC for the past ten years.[1-10] During the last year, Council members, AMA trustees, and AMA staff have participated in the following meetings with the ABMS and its member boards:

- ABMS Committee on Continuing Certification
- ABMS Forum on Organizational Quality Improvement
- ABMS 2018 Conference
- Maintenance of Certification Summit
- ABMS Board of Directors Meeting
- AMA Council on Medical Education/ABMS/ABMS member boards joint meeting to explore approaches for maximizing assessment, learning, and improvement

ABMS Committee on Continuing Certification to Refocus the Direction of MOC

The ABMS Committee on Continuing Certification (3C) is charged with reviewing existing MOC programs to ensure that the ABMS member boards meet the 2015 Standards for the Program for MOC, which evaluate the effectiveness of different approaches to MOC and identify innovations to share among the boards. During 2018, the 3C approved substantive changes that have been implemented and announced new active pilot programs (Appendix E). In April and November, the 3C also met with content experts who research physician competence and administer assessment programs to discuss the future development of continuing professional development programs as well as security considerations, performance standards, and psychometric characteristics with longitudinal assessment programs.

ABMS Stakeholder Council

In 2018, the ABMS established a new Stakeholder Council to serve as an advisory body representing the interests of volunteer physicians, patients, and the public. The Council's fundamental role is to ensure that the ABMS Board of Directors makes decisions grounded in an understanding of the perspectives, concerns, and interests of multiple constituents and stakeholders who may be impacted by the work of ABMS. The Stakeholder Council is composed of five representatives from among ABMS associate members, six public members, two at-large member board executives or directors/trustees, one member from the greater credentialing community, and ten practicing physicians.

ABMS Accountability and Resolution Committee

In 2018, the ABMS also established the Accountability and Resolution Committee (ARC). The ARC serves as a subcommittee of the ABMS Board of Directors and addresses and makes

recommendations to resolve complaints and problems related to noncompliance by the boards, both organizational and individual, that have not been resolved through other mechanisms.

Update on Membership of Young Physicians Serving on ABMS and ABMS Member Boards

The ABMS is working with its member boards to encourage early-career physicians to participate in ABMS work by promoting opportunities for engagement to young physicians, reducing travel obligations with online/remote engagement opportunities, choosing easily accessible locations for in-person meetings, and integrating opportunities for engagement into established annual meetings whenever possible.

The boards recognize that early-career physicians have demands on their time, and that committing to participation on ABMS and/or ABMS member board leadership boards or committees may not be feasible. However, it is common for early-career physicians to begin their involvement with the member boards by serving as volunteer test item writers. The ABMS and the member boards recruit and encourage early-career physicians to participate, solicit nominations from medical societies for opportunities including the newly formed Stakeholder Council, promote volunteer opportunities on diplomate dashboards and websites, and promote volunteer opportunities through social media platforms. The member boards also encourage early-career physicians to participate in focus groups and to contribute to standard setting and practice analysis groups. Further, the ABMS and some member boards have Visiting Scholars Programs that encourage early-career physicians to get involved through scholarly work in the member boards community.

Update on New Innovative Continuing Medical Education (CME) Models

The ABMS Continuing Certification Directory™ (https://www.abms.org/initiatives/abms-continuing-certification-directory/) continues to offer physicians access to a comprehensive, centralized, web-based repository of CME activities that have been approved for MOC credit by ABMS member boards. During the past year, the directory has increased its inventory and now indexes 700-plus activities from more than 60 CME providers to help diplomates from across the specialties meet MOC requirements for Lifelong Learning and Self-Assessment (Part II) and Improvement in Medical Practice (Part IV).

The following types of activities are currently included in the directory: internet enduring activities, journal CME, internet point of care, live activities, and performance improvement CME. All CME activities are qualified to award credit(s) from one or more of the CME credit systems: *AMA PRA Category 1 Credit*™, AAFP Prescribed Credit, ACOG Cognates, and AOA Category 1-A.

The member boards also employ technology to personalize assessments that promote greater self-awareness and support participation in CME. For example, the American Board of Anesthesiology (ABA) is now able to link assessment results from its MOCA Minute® program with CME opportunities. More than half (53 percent) of MOCA Minute® questions can be linked to at least one CME activity, and more than 110 accredited CME providers have been able to link a combined total of 3,261 activities to the MOCA content outline.[11]

Elimination of the Secure, High-stakes Examination for Assessing Knowledge and Cognitive Skills in MOC

Twenty-three ABMS member boards (95.8 percent) have moved away from the secure, high-stakes exam, and more than three-fourths of the boards (75 percent) have completed, or will soon be launching, assessment pilots that combine adult learning principles with state-of-the-art

technology, enabling delivery of assessments that promote learning and are less stressful (Appendix F).

Three member boards will be converting their pilot programs into permanent options in 2019. The ABA, American Board of Obstetrics and Gynecology (ABOG), and American Board of Pediatrics (ABP) will offer innovative alternatives to the traditional examinations, which may offer both time and cost savings to physicians certified by these boards by reducing or eliminating the need for study courses, travel to exam centers, and time away from practice. Overall, the programs allow physicians to assess their knowledge, fill knowledge gaps, and demonstrate their proficiency. The programs engage physicians in answering 80 to 120 questions per year; allow for the development of practice-relevant content; offer convenient access on computer, tablet, or smartphone; and provide immediate feedback and guidance to resources for further study.

Seven ABMS member boards engaged in the longitudinal assessment approach with CertLink™—the American Board of Colon and Rectal Surgery (ABCRS), American Board of Dermatology (ABD), American Board of Medical Genetics and Genomics (ABMGG), American Board of Nuclear Medicine (ABNM), American Board of Otolaryngology-Head and Neck Surgery (ABOHNS), American Board of Pathology(ABPath), and American Board of Physical Medicine and Rehabilitation (ABPMR)—have launched their pilots. CertLink™ is a technology platform developed by the ABMS to support the boards in delivering more frequent, practice-relevant, and user-friendly competence assessments to physicians (https://www.abms.org/initiatives/certlink-platform-and-pilot-programs/). The platform provides technology to enable boards to create assessments focused on practice-relevant content; offers convenient access on desktop or mobile device (depending on each board's program); provides immediate, focused feedback and guidance to resources for further study; and provides a personalized dashboard that displays participating physicians' areas of strength and weakness. To date, more than 7,000 physicians are active on CertLink. These physicians have answered 200,000-plus questions across the seven member boards and have given CertLink a 96 percent approval rating.

Several ABMS member boards are participating in a Research and Evaluation Collaborative, sponsored by the ABMS and ABMS Research and Education Foundation, to develop metrics to define the success of the pilots, facilitate research and evaluation in areas of common interest, and share findings on the longitudinal assessment pilots. The evaluations will be used to inform ABMS member boards on how longitudinal assessment for learning and improvement can be used in conjunction with other information, such as portfolios of assessment modalities, to reach summative decisions on specialty certification status.[12]

Other member board efforts to improve Part III, Assessment of Knowledge, Judgment, and Skills, include more diplomate input into exam blueprints; integrating journal article-based core questions into assessments; modularization of exam content that allows for tailoring of assessments to reflect physicians' actual areas of practice; access during the exam to resources similar to those used at the point of care; remote proctoring to permit diplomates to be assessed at home or in the office; and performance feedback mechanisms. All boards also provide multiple opportunities for physicians to retake the Part III exam. These program enhancements will significantly reduce the cost diplomates incur to participate in MOC by reducing the need to take time off or travel to a testing center for the assessment; ensure that the assessment is practice-relevant; emphasize the role of assessment for learning; assure opportunities for remediation of knowledge gaps; and reduce the stress associated with a high-stakes test environment.

Progress with Improving MOC Part IV, Improvement in Medical Practice

The ABMS member boards have broadened the range of acceptable activities that meet the Improvement in Medical Practice (IMP) requirements, including those offered at the physician's institution and/or individual practices, to address physician concerns about the relevance, cost, and burden associated with fulfilling the IMP requirements (Appendix F). In addition to improving alignment between national value-based reporting requirements and continuing certification programs, the boards are implementing a number of activities related to registries, practice audits, and systems-based practice.

Patient registries (also known as clinical data registries) provide information to help physicians improve the quality and safety of patient care—for example, by comparing the effectiveness of different treatments for the same disease. While many member boards allow physicians to earn Part IV credit for participating in externally developed patient registries, the American Board of Ophthalmology (ABO), ABOHNS, and American Board of Family Medicine (ABFM) have designed performance improvement initiatives that are supported by registry data.

Several ABMS member boards have developed online practice assessment protocols that allow physicians to assess patient care using evidence-based quality indicators. Other initiatives include:

- Free tools to complete an IMP project, including a simplified and flexible template to document small improvements, educational videos, infographics, and enhanced web pages;
- Partnerships with specialty societies to design quality and performance improvement activities for diplomates with a population-based clinical focus;
- Successful integration of patient experience and peer review into several of the boards' IMP requirements (for example, one board has aggressively addressed the issue of cost and unnecessary procedures with an audit and feedback program);
- Integration of simulation options; and
- A process for individual physicians to develop their own improvement exercises that address an issue of personal importance, using data from their own practices, built around the basic Plan-Do-Study-Act (PDSA) process.

The ABMS member boards are aligning MOC activities with other organizations' QI efforts to reduce redundancy and physician burden while promoting meaningful participation. Nineteen of the boards encourage participation in organizational QI initiatives through the ABMS Multi-Specialty Portfolio Program™ (described below). Many boards encourage involvement in the development and implementation of safety systems or the investigation and resolution of organizational quality and safety problems. For physicians serving in research or executive roles, some boards have begun to give IMP credit for having manuscripts published, writing peer-reviewed reports, giving presentations, and serving in institutional roles that focus on QI (provided that an explicit PDSA process is used). Physicians who participate in QI projects resulting from morbidity and mortality conferences and laboratory accreditation processes resulting in the identification and resolution of quality and safety issues can also receive IMP credit from some boards.

ABMS Multi-Specialty Portfolio Program™

The ABMS Multi-Specialty Portfolio Program (Portfolio Program™) offers health care organizations a way to support physician involvement in their institution's quality and performance improvement initiatives by offering credit for the IMP component of the ABMS Program for MOC (mocportfolioprogram.org). Originally designed as a service for large hospitals, the Portfolio

Program™ is extending its reach to physicians whose practices are not primarily in institutions. This includes non-hospital organizations such as academic medical centers, integrated delivery systems, interstate collaboratives, specialty societies, and state medical societies. Recent additions among the nearly 100 current sponsors include the American Society of Anesthesiologists, Minnesota Hospital Association, Hospital Quality Institute of the California Hospital Association, and Columbus Medical Association.

More than 3,100 types of QI projects have been approved by the Portfolio Program™, in which 19 ABMS member boards participate, focusing on such areas as advanced care planning, cancer screening, cardiovascular disease prevention, depression screening and treatment, provision of immunizations, obesity counseling, patient-physician communication, transitions of care, and patient-safety related topics including sepsis and central line infection reduction. Many of these projects have had a profound impact on patient care and outcomes. For example, during the past two years, Portfolio Program™ initiatives at the Children's Hospital of Philadelphia have been responsible for decreasing inpatient hospital days for oncology patients with fever and neutropenia by more than 35 percent, preventable readmissions for neurology patients by approximately 80 percent, and rates of urinary catheterization for febrile infants by 65 percent. Additionally, rates of pneumococcal immunization among patients with chronic kidney disease have increased by 79 percent, and the application of evidence-based practices to evaluate and manage children with attention deficit disorder and hyperactivity has increased by 50 percent. There have been nearly 26,000 instances of physicians receiving MOC IMP credit through participation in the program.

Update on the Emerging Data and Literature Regarding the Value of Continuing Board Certification

The Council on Medical Education has continued to review published literature and emerging data as part of its ongoing efforts to critically review continuing board certification issues. Although physicians still report some frustrations with the ABMS MOC process,[13-15] many improvements have been made to the MOC program, making participation more relevant, efficient, convenient, and cost-effective as well as less burdensome. The member boards are utilizing a variety of ways to incorporate important quality and patient safety activities in their continuing certification programs.[16] In addition, important peer-reviewed studies published during the last year demonstrate the benefits of participating in a continuous certification program. These studies are summarized below.

<u>Association between Continuous Certification and Practice-related Outcomes</u>

- A study that evaluated a QI intervention that trained providers on human papillomavirus (HPV) vaccination recommendations and communication methods showed that a learning collaborative model provides an effective forum for practices to improve HPV vaccine delivery. This QI intervention reduced missed opportunities for HPV vaccination in 33 community practices and 14 pediatric continuity clinics over nine months. This QI effort offered ABP MOC Part IV credit, as well as ABFM MOC Part IV credit, as incentives for participation.[17]
- A QI effort utilizing an injury prevention screening tool at pediatric offices to facilitate discussions and rescreenings with families at subsequent practitioner visits resulted in substantially improved practitioner-patient communications and more families reporting safer behaviors at later visits. Physicians who participated and submitted data for the QI effort received ABP MOC Part IV credit.[18]
- A QI effort to evaluate how a distance-learning, QI intervention to improve pediatric primary care physicians' use of attention-deficit/hyperactivity disorder parent and teacher rating scales

showed that the level of engagement in this QI effort was an important consideration. The results of the study, involving 105 clinicians at 19 sites, showed that those who participated in at least one feedback call, and those who participated in MOC, had higher rates of sending parent rating scales.[19]

- A study to determine the impact of a multi-component QI intervention on Chlamydia screening rates for young women showed that this practice-based QI intervention resulted in a 21 percent increase in annual Chlamydia screening rates among adolescent females without lengthening median visit time. This effort offered ABP MOC Part IV credit as an incentive for participation.[20]
- A study that assessed whether participation by Georgia pediatricians in the Healthy Weight Counseling MOC program was associated with greater use of weight management strategies showed that such participation was indeed associated with increased use of health messages and behavior change goal-setting. Importantly, weight-related counseling practices were sustained six months after the program ended.[21]
- A QI effort to review an electronic medical records tool called My Personal Outcomes Data (MyPOD) that tracked surgical outcomes at the Nemours-AI duPont Hospital for Children compared MyPOD and the National Surgical Quality Improvement Program (NSQIP) databases. The NSQIP program and similar EMR-driven tools are becoming essential components of the American Board of Surgery (ABS) MOC process. The study showed how problems that can occur with self-reporting can be addressed through the MOC Part IV process.[22]
- A study to determine if a decrease in CT scans for emergency department patients with a chief complaint of headache was followed by an increase in missed diagnoses or an increase in mortality rates showed that out of 582 patients, there were 10 missed diagnoses and 9 deaths, but no difference in mortality rate, after a reduction in CT scans. The authors concluded that these results show that the use of CT scans may be safely reduced for emergency department patients. The study fulfilled the American Board of Emergency Medicine (ABEM) MOC QI requirement, which required collecting data before and after the intervention.[23]
- In a study presenting the results of a survey of 112 radiology departments across the United States regarding quality indicators, MOC participation was found to be varied and a requirement of employment for nearly half of the respondents. The authors note that MOC is currently the best measure of a radiologist staying current with recommended practices.[24]
- A study to examine the practice behavior of emergency medicine physicians when caring for patients with chest pain showed that resident emergency physicians were more likely to hospitalize patients and board-certified physicians were more likely to discharge patients, which the study attributes to possible levels of clinical experience among these physicians and a concern that an acute coronary syndrome (ACS) diagnosis could be missed. The authors conclude that the overestimation of ACS without risk assessment was prevalent among emergency resident physicians.[25]
- A study conducted to determine if the imposition of American Board of Internal Medicine (ABIM) MOC completion requirements affected adherence to guideline-compliant mammography screening for Medicare beneficiaries showed that the MOC requirement was associated with an increase in annual screening and biennial screening, leading to improved guideline-compliant mammography screening.[26]
- A study to assess associations between MOC and performance on Healthcare Effectiveness Data and Information Set (HEDIS) process measures showed that maintaining certification was positively associated with performance scores on these process measures.[27]
- Price et al. evaluated 39 studies to examine the relationship of MOC to physician knowledge, clinical practice processes, or patient care outcomes. The studies in this analysis offered examples of how continuing certification can work or how it is currently working and showed

positive associations between participation in MOC program activities and physician and patient outcomes.[28]

- A literature review by Holloway examined evidence for improved HPV vaccination rates from 46 studies. The studies show that using a multi-method approach—such as a MOC PI CME intervention that combines repeated contacts, education, individualized feedback, and strong quality improvement incentives to increase both initiation and completing dosing of the HPV vaccine series among male and female adolescents—will increase vaccination rates.[29-30]

Standardized Simulation-based Assessment, Performance Gaps, and Opportunities for Improvement

- A study to determine whether mannequin-based simulation can reliably characterize how board-certified anesthesiologists manage simulated medical emergencies showed that standardized simulation-based assessment identified performance gaps and informed opportunities for improvement. The study involved 263 consenting board-certified anesthesiologists participating in existing simulation-based MOC courses at one of eight simulation centers.[31]
- Based on a literature review, the author discusses how obstetric simulation and simulation hands-on courses, used by the American College of Obstetricians and Gynecologists, the Society for Maternal-Fetal Medicine, and the ABOG, fulfill continuing certification/MOC requirements.[32]

Comparison of Continuous Certification to Medical Licensure Actions

- The ABS analyzed loss of license actions for 15,500 general surgeons who were initially certified by the ABS. The study authors found that surgeons who recertified on time following initial board certification (who did not allow their initial certification to lapse) had a significantly lower likelihood of future loss of medical license than those who allowed their initial certification to lapse or never recertified.[33]
- Research that compared the medical license actions of 15,486 anesthesiologists certified between 1994 and 1999 (non–time-limited certificate holders who are not required to participate in MOCA®) and those certified between 2000 and 2005 (time-limited certificate holders who are required to participate in MOCA) showed that board-certified anesthesiologists who met MOCA program requirements were less likely to be disciplined by a state medical licensing agency. There was also evidence that voluntary participation in MOCA by lifetime certificate holders was linked to a lower occurrence of license actions.[34]
- A study that examined the association between family physicians receiving a disciplinary action from a state medical board and certification by the American Board of Family Medicine, using data from 1976 to 2017, showed that 95 percent (114,454 of 120,443) of the family physicians studied had never received any disciplinary action. The authors concluded that family physicians who had ever been ABFM-certified were less likely to receive an action; the most severe actions were associated with decreased odds of being board certified at the time of the action; and receiving the most severe action type increased the likelihood of physicians holding a prior but not current certification.[35]
- A study that compared the association of disciplinary actions with passing the ABIM MOC examination within ten years of initial certification showed that disciplinary actions decreased with better MOC examination scores.[36]

The Importance of Continuous Certification and Physician Satisfaction with Continuous Certification

- A study involving 8,714 diplomates that examined the number of practicing pediatricians who participate in QI activities showed that nearly 87 percent of diplomates indicated participation in a QI project. While maintaining certification was identified as the main driver for participation, respondents also indicated identification of practice gaps, implementing change in practice, and collaborating with others as factors for participation.[37]
- A survey study of 289 dermatologists who completed ABD MOC-focused Practice Improvement (fPI) modules, showed that participants identified the module activities as relevant and helpful in identifying practice gaps. Most participants (254 [87.9 percent]) felt that the activities reaffirmed their practice, and would recommend the fPI modules.[38]
- An evaluation of the ABFM diplomate feedback survey data to examine family physician opinions about ABFM self-assessment module (SAM) content (448,408 SAM feedback surveys were completed within the period 2006-2016) showed that family medicine diplomates generally value SAMs. Respondents felt that the SAM content is appropriate, and favorability ratings increased as diplomates engaged in more SAM activities.[39]
- A study that examined how improving ABFM's SAM content and technical interface could make SAMs more meaningful to ABFM diplomates resulted in mixed feedback between separate modules; overall, respondents indicated satisfaction with and positive reactions to the SAMs, with 80 percent giving SAMs a positive rating. The authors conclude that the results of this study can assist in understanding physicians' perceptions and inform MOC program activities of other specialties.[40]

More than 60 sessions at the ABMS annual QI Forum held during the 2018 ABMS Conference (https://www.abmsconference.com/session-descriptions-2018/) focused on innovations in board certification, the science of assessment and learning, quality improvement, health policy research, and patient safety. Posters presented by the ABMS Portfolio Program™ sponsors and other health care researchers underscored best practices and research in continuing certification and QI activities (https://www.abmsconference.com/posters-2018/).

The Council on Medical Education is committed to monitoring emerging data and the literature to identify improvements to continuing board certification programs, especially those that improve physician satisfaction and patient outcomes and those that enable physicians to keep pace with advances in clinical practice, technology, and assessment.

UPDATE ON OSTEOPATHIC CONTINUOUS CERTIFICATION

The American Osteopathic Association Bureau of Osteopathic Specialists (AOA-BOS) was organized in 1939 as the Advisory Board for Osteopathic Specialists to meet the needs resulting from the growth of specialization in the osteopathic profession. Today, 18 AOA-BOS specialty certifying boards offer osteopathic physicians the option to earn board certification in several specialties and subspecialties. As of December 31, 2017, 31,762 osteopathic physicians were certified by the AOA and held a combined total of 36,982 active certifications, representing a 7 percent increase over the number of active certifications held in 2016 (34,555). In 2017, 2,206 new certifications were processed as follows:

- Primary specialty: 1,891
- Subspecialty: 224
- Certification of added qualifications (family medicine and preventive medicine only): 91

Additionally, 1,357 OCC completions were processed in 2017.

In January 2017, the AOA impaneled the AOA Certifying Board Services (CBS) Task Force II to address the directive of enhancing board certification services and marketability to make AOA board certification more attractive. Specifically, the Task Force was charged with addressing the following goals:

- Aligning AOA board leadership structure to strengthen physician-led, professionally managed relationships. The demands on CBS have grown substantially, and the expectations placed on the CBS are more than the current system can handle. The goal is to have working physicians serve as the backbone of AOA certification while allowing them to focus on specific tasks that require a physician's skill set and expertise, with administrative support of these efforts delegated to non-physicians.
- Unifying the osteopathic certifying boards through common practices, bylaws, reporting processes, operational alignment, and expenses, and developing uniform, reasonable, and competitive examination fees.

The CBS presented its recommendations to the BOS at its midyear meeting on April 8, 2017. Several of these recommendations are currently being implemented by CBS. For example, board meetings are being aligned into a cluster-based system to facilitate communication. Initiatives to standardize operations to ensure consistent products are also underway.[41] All 18 boards also submitted their new OCC plans to the BOS for review and approval.

The following is a summary of the OCC components listed in the most current BOS Handbook (https://certification.osteopathic.org/wp-content/uploads/2017/05/bos-handbook.pdf):

- Component 1 - Active Licensure:
  AOA board-certified physicians must hold a valid, active license to practice medicine in one of the 50 states or Canada. In addition, they are required to adhere to the AOA's Code of Ethics.

- Component 2 - Life Long Learning/CME:
  CME requirements for diplomates participating in OCC are as follows:
  1. A minimum of 60 CME credits in the specialty area of certification during the specialty boards' 2016-2018 CME cycle.
  2. There are variances across the 18 boards with regards to specific CME inclusions. It is important to refer to each specialty board's website (certification.osteopathic.org) or the current AOA CME Guide (osteopathic.org/cme/cme-guide) for those specifics.

- Component 3 – Cognitive Assessment:
  1. Diplomates must sit for/complete and pass one (or more) psychometrically valid, ongoing assessments during each OCC cycle.
  2. The assessment must evaluate the diplomate's knowledge and skill in the given specialty or subspecialty.

- Component 4 - Practice Performance Improvement and Assessment:
  Diplomates must engage in continuous quality improvement by satisfying one of the following:
  1. Attestation to or online submission of evidence of participation in quality improvement activities.
  2. Completion of Practice Performance Assessment Modules (PPAs) developed by specialty boards and approved by the Standards Review Committee (SRC) of the BOS.

3. Completion of verifiable, quality-driven, or clinically focused encounters that assess the physician's clinical acumen.

CERTIFYING BODIES THAT COMPETE WITH THE ABMS

AMA Policy D-275.954 (39), "Maintenance of Certification and Osteopathic Continuous Certification," asks the AMA to continue studying the certifying bodies that compete with the ABMS. Appendix G provides information on the recertification requirements of the ABMS, AOA, American Board of Physician Specialties, National Board of Physicians and Surgeons (NBPAS), American Board of Facial Plastic and Reconstructive Surgery, and the American Board of Cosmetic Surgery.

In its previous reports,[2-3] the Council noted that wide-scale use of long-standing traditional recertification programs, such as the ABMS MOC, are reflected in training and delivery systems, and based on core competencies developed and adopted by the ABMS and the Accreditation Council for Graduate Medical Education. The MOC program was designed to provide a comprehensive approach to physician lifelong learning, self-assessment, and practice improvement, and strives to identify those physicians capable of delivering high-quality specialized medical care.[42]

Newer alternative pathways to specialty board recertification, such as the NBPAS, have been formed to provide a type of recertification that is less rigorous than that obtained via the ABMS MOC process.[43] Ongoing concerns have been registered about administrative burdens, value of the program, relevance and cost of the ABMS MOC process, and time away from patient care. It is important to note that the NBPAS does not have an external assessment or IMP requirements.

AMA policy reinforces the need for ongoing learning and practice improvement and supports the need for an evidence-based certification process that is evaluated regularly to ensure physicians' needs are being met and that activities are relevant to clinical practice. The AMA has adopted extensive policy (H-275.924) that outlines the principles of the ABMS MOC and AOA-BOS OCC and supports the intent of these programs.

CURRENT AMA POLICIES RELATED TO MOC AND OCC

The ABMS Board of Directors is currently using a new name, "Continuing Board Certification," for its MOC Program (although some ABMS member boards are still referring to the program as MOC). To be consistent with this change, this report recommends that the terms "Maintenance of Certification" that appear in the title and body of HOD Policies H-275.924, "AMA Principles on Maintenance of Certification," and D-275.954, "Maintenance of Certification and Osteopathic Continuous Certification," should be changed to "Continuing Board Certification" or "CBC" as shown in Appendix H.

SUMMARY AND RECOMMENDATIONS

The Council on Medical Education is committed to ensuring that continuing board certification programs support physicians' ongoing learning and practice improvement and serve to assure the public that physicians are providing high-quality patient care. The AMA will continue to advocate for a certification process that is evidence-based and relevant to clinical practice as well as cost-effective and inclusive to reduce duplication of work. During the last year, the Council has continued to monitor the development of continuing board certification programs and to work with the ABMS, ABMS member boards, AOA, and state and specialty medical societies to identify and

suggest improvements to these programs. The AMA has also been involved in the Continuing Board Certification: Vision for the Future Commission and in the development of the Commission's recommendations for the future continuing board certification process.

The Council on Medical Education therefore recommends that the following recommendations be adopted in lieu of Resolution 316-A-18 and the remainder of the report be filed.

1. That our American Medical Association (AMA), through its Council on Medical Education, continue to work with the American Board of Medical Specialties (ABMS), ABMS Committee on Continuing Certification (3C), and ABMS Stakeholder Council to pursue opportunities to implement the recommendations of the Continuing Board Certification: Vision for the Future Commission and AMA policies related to continuing board certification. (Directive to Take Action)

2. That our AMA, to be consistent with terminology now used by the American Board of Medical Specialties, amend the following policies by addition and deletion to read as follows:

   Policy H-275.924, Amend the title to read, "~~Maintenance of~~ Continuing Board Certification" (AMA Principles on ~~Maintenance of~~ Continuing Board Certification), and replace the terms "Maintenance of Certification" and "MOC" with "Continuing Board Certification" and "CBC" throughout the policy, as shown in Appendix H.

   Policy D-275.954, Amend the title to read, "~~Maintenance of Certification and Osteopathic Continuous Certification~~ Continuing Board Certification," and replace the terms "Maintenance of Certification" and "MOC" with "Continuing Board Certification" and "CBC" throughout the policy, as shown in Appendix H. (Modify Current HOD Policy)

3. That our AMA rescind Policy D-275.954 (37), "Maintenance of Certification and Osteopathic Continuous Certification," that asks the AMA to "Through its Council on Medical Education, continue to be actively engaged in following the work of the ABMS Continuing Board Certification: Vision for the Future Commission," as this has been accomplished. (Rescind HOD Policy)

4. That our AMA rescind Policy D-275.954 (38), which asks our AMA to "Submit commentary to the American Board of Medical Specialties (ABMS) Continuing Board Certification: Vision for the Future initiative, asking that junior diplomates be given equal opportunity to serve on ABMS and its member boards," as this has been accomplished. (Rescind HOD Policy)

5. That our AMA rescind Policy D- 275.954 (39) "Maintenance of Certification and Osteopathic Continuous Certification," as this has been accomplished through this report. (Rescind HOD Policy)

Fiscal Note: $2,500.

APPENDIX A

AMA
AMERICAN MEDICAL ASSOCIATION

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January 15, 2019

Christopher Colenda, MD, MPH
William J. Scanlon, PhD
Co-Chairs, Continuing Board Certification: Vision for the Future Commission

Dear Drs. Colenda and Scanlon,

Thank you for the opportunity to review and comment on the draft report and recommendations from the Continuing Board Certification: Vision for the Future Commission (the "Commission"). The American Medical Association (AMA) Council on Medical Education (the "Council") values your efforts to make continuing certification more relevant, meaningful, and of value to both physicians and patients alike.

The Council applauds the Commission not only for producing such a thorough report, but equally for acknowledging long-standing physician frustrations, such as the concern that the benefits of the continuing certification process traditionally have not been worth the time or financial investment required for participation.

As the report and recommendations are finalized, the Council invites the Commission to consider the following comments.

Preamble

The Council strongly objects to the second paragraph of the section "Purpose and Value of Continuing Certification" on page 7 of the Preamble (which starts, "A fundamental axiom…").

Historically, diplomates have consistently and vocally expressed concern regarding linkages between continuing certification and licensure, and AMA policy with respect to this issue explicitly rejects any such association. Additionally, renewal of licensure in many states is primarily based on completion of CME hours; this does not support the general premise of this report, which argues that rigorous standards must be met to achieve meaningful lifelong learning and assure patient safety.

The Council, therefore, recommends that this paragraph be carefully considered and rewritten; left as is, it may undermine the thoughtful work that characterizes the remainder of the report.

Recommendation 2
Continuing certification should incorporate assessments that support diplomate learning and retention, identify knowledge and skill gaps, and help diplomates learn advances in the field.

The Commission should employ stronger language regarding secure, high-stakes examinations for knowledge assessment. While the Council believes that flexibility in the certification process is important, the Commission should recommend that all Boards incorporate models based on ongoing assessment and feedback, which are better exemplars of contemporary standards of adult learning principles.

Recommendation 4
Standards for learning and practice improvement must expect diplomate participation and meaningful engagement in both lifelong learning and practice improvement. ABMS Boards should seek to integrate readily available information from a diplomate's actual clinical practice into any assessment of practice improvement.

The Commission should recommend that all Boards utilize stronger language regarding the acceptance of quality data already being reported by individual physicians. If a physician is actively participating in the Centers for Medicare and Medicaid Services (CMS) Quality Payment Program (QPP) via the Merit-based Incentive Payment System (MIPS) or an Advanced Alternative Payment Model (APM), the Commission should recommend that all Boards accept this participation as a satisfactory requirement for certification.

Recommendation 5
ABMS Boards have the responsibility and obligation to change a diplomate's certification status when certification standards are not met.

The Council feels strongly that Recommendation 5 should be edited as follows:

"ABMS Boards have the responsibility and obligation to change a diplomate's continuing certification status when continuing certification standards are not met."

Likewise, the first sentence of the explanation for Recommendation 5 should be modified:

"The Commission supports the ABMS Boards in making decisions about the continuing certification status of a diplomate and changing the diplomate's status when continuing certification standards are not met."

At no time can a Board revoke or change an individual physician's original certification solely on the basis of non-participation in the continuing certification process.

Recommendation 8
The certificate has value, meaning and purpose in the health care environment.

Although the report does specify that board certification should not be tied to credentialing, there is no parallel mention of this with respect to medical licensure. The Commission should address this explicitly to assuage long-held and expressed concerns that the Federation of State Medical Boards (FSMB) may at some point tie certification to licensure (although the Council recognizes that this is not the current policy of the FSMB).

Recommendation 11
ABMS Boards must comply with all ABMS certification and organizational standards.

The Council notes that while financial transparency is included in the findings of both Recommendations 10 and 11, it is not specifically referenced in either of the Recommendations themselves. Detailed financial transparency regarding fiscal responsibility toward diplomates must be a cornerstone of all Board models, and may help communicate the message that the concerns of many diplomates who have expressed anxiety on this point have been heard and are being addressed.

The Council applauds the report for its recommendation of inclusion with respect to Board composition; the Commission may wish specifically to include mention of young physicians.

Recommendation 14
ABMS Boards should have consistent certification processes for certain elements.

The Council appreciates the intention behind this Recommendation, and recognizes that diplomates of certain Boards have expressed frustration regarding their individual Board's lack of momentum with respect to innovation. While it may make sense to standardize terminology across Boards, a more cautious approach may be appropriate when thinking about standardization of processes, as different specialties require varied approaches to ongoing certification and diplomates in many specialties are satisfied with their individual Board's innovations to date.

The Council, therefore, recommends that the Commission strongly encourage the ABMS to develop and publicly share its plans to actively oversee and navigate its approach to consistency. The Council also recommends that the Commission strongly encourage the ABMS to consider the negative public impact that less innovative Boards may be having on those that have dedicated significant time and resources to improving their processes for diplomates. Further, the Council recommends that the Commission encourage the ABMS to publicize its newly established Accountability and Resolution Committee (ARC), tasked with addressing and making recommendations to resolve complaints and problems related to non-compliance, both organizational and individual, that have not been resolved through other mechanisms, and to ensure that the ARC's processes and decisions are transparent to the public.

General Comments

- The Council feels that the final sentence in the Concluding Comments, which references "better doctors," is somewhat subjective, and suggests that the Commission consider language that recognizes the importance of doctors who remain current in the appropriate competencies to best serve their patients.

- Continuing medical education (CME) activities are discussed in detail on page 18 of the report. The Commission may wish to modify the sentence that references the ACCME, as entities beyond the ACCME are involved in this important process:

  "Those involved in developing and approving CME activities, and setting standards for such activities, should be encouraged to establish processes to encourage high quality CME and remediate or eliminate lower quality activities."

- Page 21 of the report focuses on the public's expectations. The Council believes it is important to acknowledge that continuing certification is but one component to promote patient safety and quality. Health care is a systems-based team effort, and changes to continuing certification should not create the unrealistic expectation that lapses in patient safety are primarily failures of individual physicians.

Again, thank you for the opportunity to participate in this important process. If the Council may be of further assistance to you in this matter, please do not hesitate to communicate with us.

Sincerely,

Jacqueline A. Bello, MD, FACR
Chair-Elect, AMA Council on Medical Education

cc: Susan E. Skochelak, MD
Richard E. Hawkins, MD

APPENDIX B

Impact of the Council on Medical Education's Comments on the Final Recommendations of the Continuing Board Certification: Vision for the Future Commission

Draft Recommendations/Council on Medical Education Comments	Final Recommendations*
2. Continuing certification should incorporate assessments that support diplomate learning and retention, identify knowledge and skill gaps, and help diplomates learn advances in the field. The Commission should employ stronger language regarding secure, high-stakes examinations for knowledge assessment. While the Council believes that flexibility in the certification process is important, the Commission should recommend that all Boards incorporate models based on ongoing assessment and feedback, which are better exemplars of contemporary standards of adult learning principles.	2. Continuing certification must change to incorporate longitudinal and other innovative formative assessment strategies that support learning, identify knowledge and skills gaps, and help diplomates stay current. The ABMS Boards must offer an alternative to burdensome highly-secure, point-in-time examinations of knowledge.
4. Standards for learning and practice improvement must expect diplomate participation and meaningful engagement in both lifelong learning and practice improvement. ABMS Boards should seek to integrate readily available information from a diplomate's actual clinical practice into any assessment of practice improvement. The Commission should recommend that all Boards utilize stronger language regarding the acceptance of quality data already being reported by individual physicians. If a physician is actively participating in the Centers for Medicare and Medicaid Services (CMS) Quality Payment Program (QPP) via the Merit-based Incentive Payment System (MIPS) or an Advanced Alternative Payment Model (APM), the Commission should recommend that all Boards accept this participation as a satisfactory requirement for certification.	13. ABMS and the ABMS Boards should collaborate with specialty societies, the CME/CPD community, and other expert stakeholders to develop the infrastructure to support learning activities that produce data-driven advances in clinical practice. The ABMS Boards must ensure that their continuing certification programs recognize and document participation in a wide range of quality assessment activities in which diplomates already engage.
5. ABMS Boards have the responsibility and obligation to change a diplomate's certification status when certification standards are not met. Recommendation 5 should be edited as follows: "ABMS Boards have the responsibility and obligation to change a diplomate's continuing certification status when continuing certification standards are not met." Likewise, the first sentence of the explanation for Recommendation 5 should be modified: "The Commission supports the ABMS Boards in making decisions about the continuing certification status of a diplomate and changing the diplomate's status when continuing certification standards are not met." At no time can a Board revoke or change an individual physician's original certification solely on the basis of non-participation in the continuing certification process.	7. The ABMS Boards must change a diplomate's certification status when continuing certification standards are not met.

8. The certificate has value, meaning and purpose in the health care environment. Although the report does specify that board certification should not be tied to credentialing, there is no parallel mention of this with respect to medical licensure. The Commission should address this explicitly to assuage long-held and expressed concerns that the Federation of State Medical Boards (FSMB) may at some point tie certification to licensure (although the Council recognizes that this is not the current policy of the FSMB).	11. ABMS must demonstrate and communicate that continuing certification has value, meaning, and purpose in the health care environment. a. Hospitals, health systems, payers and other health care organizations can independently decide what factors are used in credentialing and privileging decisions. b. ABMS must inform these organizations that continuing certification should not be the only criterion used in these decisions and these organizations should use a wide portfolio of criteria in these decisions. c. ABMS must encourage hospitals, health systems, payers, and other health care organizations to not deny credentialing or privileging to a physician solely on the basis of certification status.
11. ABMS Boards must comply with all ABMS certification and organizational standards. While financial transparency is included in the findings of both Recommendations 10 and 11, it is not specifically referenced in either of the Recommendations themselves. Detailed financial transparency regarding fiscal responsibility toward diplomates must be a cornerstone of all Board models, and may help communicate the message that the concerns of many diplomates who have expressed anxiety on this point have been heard and are being addressed. The Council applauds the report for its recommendation of inclusion with respect to Board composition; the Commission may wish specifically to include mention of young physicians.	10. The ABMS Boards must comply with all ABMS certification and organizational standards, including financial stewardship and ensuring that diverse groups of practicing physicians and the public voice are represented.
14. ABMS Boards should have consistent certification processes for certain elements. The Council appreciates the intention behind this Recommendation, and recognizes that diplomates of certain Boards have expressed frustration regarding their individual Board's lack of momentum with respect to innovation. While it may make sense to standardize terminology across Boards, a more cautious approach may be appropriate when thinking about standardization of processes, as different specialties require varied approaches to ongoing certification and diplomates in many specialties are satisfied with their individual Board's innovations to date. The Council, therefore, recommends that the Commission strongly encourage the ABMS to develop and publicly share its plans to actively oversee and navigate its approach to consistency. The Council also recommends that the Commission strongly encourage the ABMS to consider the negative public impact that less innovative Boards may be having on those that have dedicated significant time and resources to improving their processes for diplomates. Further, the Council recommends that the Commission encourage the ABMS to publicize its newly established Accountability and Resolution Committee (ARC), tasked with addressing and	4. The ABMS and the ABMS Boards must have consistent processes and requirements for continuing certification that are fair, equitable, transparent, effective, and efficient.

making recommendations to resolve complaints and problems related to non-compliance, both organizational and individual, that have not been resolved through other mechanisms, and to ensure that the ARC's processes and decisions are transparent to the public.	

* Several of the final recommendations were revised, reorganized, and renumbered in the Continuing Board Certification: Vision for the Future Commission's Final Report.

APPENDIX C

Final Recommendations of the Continuing Board Certification: Vision for the Future Commission and Related AMA Policy

Final Recommendations	Related AMA Policy
1. Continuing certification must integrate professionalism, assessment, lifelong learning, and advancing practice to determine the continuing certification status of a diplomate.	H-300.958 (7) Our AMA affirms that lifelong learning is a fundamental obligation of our profession and recognizes that lifelong learning for a physician is best achieved by ongoing participation in a program of high quality continuing medical education appropriate to that physician' s medical practice as determined by the relevant specialty society.
2. Continuing certification must change to incorporate longitudinal and other innovative formative assessment strategies that support learning, identify knowledge and skills gaps, and help diplomates stay current. The ABMS Boards must offer an alternative to burdensome highly-secure, point-in-time examinations of knowledge.	H-275.924 (22) There should be multiple options for how an assessment could be structured to accommodate different learning styles. D-275.954 Our AMA will…(5) Work with the ABMS to streamline and improve the Cognitive Expertise (Part III) component of MOC, including the exploration of alternative formats, in ways that effectively evaluate acquisition of new knowledge while reducing or eliminating the burden of a high-stakes examination. (29) Call for the immediate end of any mandatory, secured recertifying examination by the ABMS or other certifying organizations as part of the recertification process for all those specialties that still require a secure, high-stakes recertification examination. (31) Continue to work with the ABMS to encourage the development by and the sharing between specialty boards of alternative ways to assess medical knowledge other than by a secure high stakes exam. (36) Continue to work with the medical societies and the American Board of Medical Specialties (ABMS) member boards that have not yet moved to a process to improve the Part III secure, high-stakes examination to encourage them to do so.
3. The ABMS Boards must regularly communicate with their diplomates about the standards for the specialty and encourage feedback about the program.	H-275.924 (13) The MOC process should be evaluated periodically to measure physician satisfaction, knowledge uptake and intent to maintain or change practice. D-275.954 Our AMA will…(19) Continue to work with the ABMS to ensure that physicians are clearly informed of the MOC requirements for their specific board and the timelines for accomplishing those requirements. (20) Encourage the ABMS and its member boards to develop a system to actively alert physicians of the due dates of the multi-stage requirements of continuous professional development and performance in practice, thereby assisting them with maintaining their board certification.
4. The ABMS and the ABMS Boards must have consistent processes and requirements for continuing certification that are fair, equitable, transparent, effective, and efficient.	H-275.924 (19) The MOC process should be reflective of and consistent with the cost of development and administration of the MOC components, ensure a fair fee structure, and not present a barrier to patient care. (27) Our AMA will continue to work with the national medical specialty societies to advocate for the

	physicians of America to receive value in the services they purchase for Maintenance of Certification from their specialty boards. Value in MOC should include cost effectiveness with full financial transparency, respect for physicians' time and their patient care commitments, alignment of MOC requirements with other regulator and payer requirements, and adherence to an evidence basis for both MOC content and processes.
5. The ABMS Boards must enable multi-specialty and subspecialty diplomates to remain certified across multiple ABMS Boards without duplication of effort.	D-275.954 Our AMA will…(11) Work with the ABMS to lessen the burden of MOC on physicians with multiple board certifications, particularly to ensure that MOC is specifically relevant to the physician's current practice.
6. ABMS and the ABMS Boards must facilitate and encourage independent research to build on the existing evidence base about the value of continuing certification.	D-275.954 Our AMA will…(3) Continue to monitor the progress by the American Board of Medical Specialties (ABMS) and its member boards on implementation of MOC, and encourage the ABMS to report its research findings on the issues surrounding certification and MOC on a periodic basis. (4) Encourage the ABMS and its member boards to continue to explore other ways to measure the ability of physicians to access and apply knowledge to care for patients, and to continue to examine the evidence supporting the value of specialty board certification and MOC.
7. The ABMS Boards must change a diplomate's certification status when continuing certification standards are not met.	H-275.924 (24) No qualifiers or restrictions should be placed on diplomates with lifetime board certification recognized by the ABMS related to their participation in MOC. (26) The initial certification status of time-limited diplomates shall be listed and publicly available on all American Board of Medical Specialties (ABMS) and ABMS Member Boards' websites and physician certification databases. The names and initial certification status of time-limited diplomates shall not be removed from ABMS and ABMS Member Boards' websites or physician certification databases even if the diplomate chooses not to participate in MOC.
8. The ABMS Boards must have clearly defined remediation pathways to enable diplomates to meet continuing certification standards in advance of and following any loss of certification.	D-295.325 (4) Our AMA will partner with the FSMB and state medical licensing boards, hospitals, professional societies and other stakeholders in efforts to support the development of consistent standards and programs for remediating deficits in physician knowledge and skills.
9. ABMS and the ABMS Boards must make publicly available the certification history of all diplomates, including their participation in the continuing certification process. The ABMS Boards must facilitate voluntary re-engagement into the continuing certification process for lifetime certificate holders and others not currently participating in the continuing certification process.	H-275.924 (24) No qualifiers or restrictions should be placed on diplomates with lifetime board certification recognized by the ABMS related to their participation in MOC. (26) The initial certification status of time-limited diplomates shall be listed and publicly available on all American Board of Medical Specialties (ABMS) and ABMS Member Boards' websites and physician certification databases. The names and initial certification status of time-limited diplomates shall not be removed from ABMS and ABMS Member Boards' websites or physician certification databases even if the diplomate chooses not to participate in MOC.

10. The ABMS Boards must comply with all ABMS certification and organizational standards, including financial stewardship and ensuring that diverse groups of practicing physicians and the public voice are represented.	H-275.924 (27) Our AMA will continue to work with the national medical specialty societies to advocate for the physicians of America to receive value in the services they purchase for Maintenance of Certification from their specialty boards. Value in MOC should include cost effectiveness with full financial transparency, respect for physicians' time and their patient care commitments, alignment of MOC requirements with other regulator and payer requirements, and adherence to an evidence basis for both MOC content and processes. D-275.954 Our AMA will…(10) Encourage the ABMS to ensure that MOC and certifying examinations do not result in substantial financial gain to ABMS member boards, and advocate that the ABMS develop fiduciary standards for its member boards that are consistent with this principle.
11. ABMS must demonstrate and communicate that continuing certification has value, meaning, and purpose in the health care environment. a. Hospitals, health systems, payers and other health care organizations can independently decide what factors are used in credentialing and privileging decisions. b. ABMS must inform these organizations that continuing certification should not be the only criterion used in these decisions and these organizations should use a wide portfolio of criteria in these decisions. c. ABMS must encourage hospitals, health systems, payers, and other health care organizations to not deny credentialing or privileging to a physician solely on the basis of certification status.	H-275.924 (15) The MOC program should not be a mandated requirement for licensure, credentialing, recredentialing, privileging, reimbursement, network participation, employment, or insurance panel participation. (27) Our AMA will continue to work with the national medical specialty societies to advocate for the physicians of America to receive value in the services they purchase for Maintenance of Certification from their specialty boards. Value in MOC should include cost effectiveness with full financial transparency, respect for physicians' time and their patient care commitments, alignment of MOC requirements with other regulator and payer requirements, and adherence to an evidence basis for both MOC content and processes. D-275.954 Our AMA will…(6) Work with interested parties to ensure that MOC uses more than one pathway to assess accurately the competence of practicing physicians, to monitor for exam relevance and to ensure that MOC does not lead to unintended economic hardship such as hospital de-credentialing of practicing physicians. (33) Through legislative, regulatory, or collaborative efforts, will work with interested state medical societies and other interested parties by creating model state legislation and model medical staff bylaws while advocating that Maintenance of Certification not be a requirement for: (a) medical staff membership, privileging, credentialing, or recredentialing; (b) insurance panel participation; or (c) state medical licensure.
12. ABMS and the ABMS Boards must seek input from other stakeholder organizations to develop consistent approaches to evaluate professionalism and professional standing while ensuring due process for the diplomate when questions of professionalism arise.	9.4.1 Peer Review & Due Process. Physicians have mutual obligations to hold one another to the ethical standards of their profession. Peer review, by the ethics committees of medical societies, hospital credentials and utilization committees, or other bodies, has long been established by organized medicine to scrutinize professional conduct. Peer review is recognized and accepted as a means of promoting professionalism and maintaining trust. The peer review process is intended to balance physician' right to

	exercise medical judgment freely with the obligation to do so wisely and temperately. Fairness is essential in all disciplinary or other hearings where the reputation, professional status, or livelihood of the physician or medical student may be adversely affected. Individually, physicians and medical students who are involved in reviewing the conduct of fellow professionals, medical students, residents or fellows should: (a) Always adhere to principles of a fair and objective hearing, including: (i) a listing of specific charges, (ii) adequate notice of the right of a hearing, (iii) the opportunity to be present and to rebut the evidence, and (iv) the opportunity to present a defense. (b) Ensure that the reviewing body includes a significant number of persons at a similar level of training. (c) Disclose relevant conflicts of interest and, when appropriate, recuse themselves from a hearing. Collectively, through the medical societies and institutions with which they are affiliated, physicians should ensure that such bodies provide procedural safeguards for due process in their constitutions and bylaws or policies.
13. ABMS and the ABMS Boards should collaborate with specialty societies, the CME/CPD community, and other expert stakeholders to develop the infrastructure to support learning activities that produce data-driven advances in clinical practice. The ABMS Boards must ensure that their continuing certification programs recognize and document participation in a wide range of quality assessment activities in which diplomates already engage.	D-275.954 Our AMA will…(12) Work with key stakeholders to (a) support ongoing ABMS member board efforts to allow multiple and diverse physician educational and quality improvement activities to qualify for MOC; (b) support ABMS member board activities in facilitating the use of MOC quality improvement activities to count for other accountability requirements or programs, such as pay for quality/performance or PQRS reimbursement; (c) encourage ABMS member boards to enhance the consistency of quality improvement programs across all boards; and (d) work with specialty societies and ABMS member boards to develop tools and services that help physicians meet MOC requirements. (18) Encourage medical specialty societies' leadership to work with the ABMS, and its member boards, to identify those specialty organizations that have developed an appropriate and relevant MOC process for its members.
14. The ABMS Boards must collaborate with professional and/or CME/CPD organizations to share data and information to guide and support diplomate engagement in continuing certification.	D-275.954 Our AMA will…(30) Support a recertification process based on high quality, appropriate Continuing Medical Education (CME) material directed by the AMA recognized specialty societies covering the physician's practice area, in cooperation with other willing stakeholders, that would be completed on a regular basis as determined by the individual medical specialty, to ensure lifelong learning.

APPENDIX D

Current HOD Policies Related to Maintenance of Certification and Osteopathic Continuous Certification

H-275.924, Maintenance of Certification
AMA Principles on Maintenance of Certification (MOC)
1. Changes in specialty-board certification requirements for MOC programs should be longitudinally stable in structure, although flexible in content.
2. Implementation of changes in MOC must be reasonable and take into consideration the time needed to develop the proper MOC structures as well as to educate physician diplomates about the requirements for participation.
3. Any changes to the MOC process for a given medical specialty board should occur no more frequently than the intervals used by that specialty board for MOC.
4. Any changes in the MOC process should not result in significantly increased cost or burden to physician participants (such as systems that mandate continuous documentation or require annual milestones).
5. MOC requirements should not reduce the capacity of the overall physician workforce. It is important to retain a structure of MOC programs that permits physicians to complete modules with temporal flexibility, compatible with their practice responsibilities.
6. Patient satisfaction programs such as The Consumer Assessment of Healthcare Providers and Systems (CAHPS) patient survey are neither appropriate nor effective survey tools to assess physician competence in many specialties.
7. Careful consideration should be given to the importance of retaining flexibility in pathways for MOC for physicians with careers that combine clinical patient care with significant leadership, administrative, research and teaching responsibilities.
8. Legal ramifications must be examined, and conflicts resolved, prior to data collection and/or displaying any information collected in the process of MOC. Specifically, careful consideration must be given to the types and format of physician-specific data to be publicly released in conjunction with MOC participation.
9. Our AMA affirms the current language regarding continuing medical education (CME): "Each Member Board will document that diplomates are meeting the CME and Self-Assessment requirements for MOC Part II. The content of CME and self-assessment programs receiving credit for MOC will be relevant to advances within the diplomate's scope of practice, and free of commercial bias and direct support from pharmaceutical and device industries. Each diplomate will be required to complete CME credits (AMA PRA Category 1 Credit", American Academy of Family Physicians Prescribed, American College of Obstetricians and Gynecologists, and/or American Osteopathic Association Category 1A)."
10. In relation to MOC Part II, our AMA continues to support and promote the AMA Physician's Recognition Award (PRA) Credit system as one of the three major credit systems that comprise the foundation for continuing medical education in the U.S., including the Performance Improvement CME (PICME) format; and continues to develop relationships and agreements that may lead to standards accepted by all U.S. licensing boards, specialty boards, hospital credentialing bodies and other entities requiring evidence of physician CME.
11. MOC is but one component to promote patient safety and quality. Health care is a team effort, and changes to MOC should not create an unrealistic expectation that lapses in patient safety are primarily failures of individual physicians.
12. MOC should be based on evidence and designed to identify performance gaps and unmet needs, providing direction and guidance for improvement in physician performance and delivery of care.

13. The MOC process should be evaluated periodically to measure physician satisfaction, knowledge uptake and intent to maintain or change practice.
14. MOC should be used as a tool for continuous improvement.
15. The MOC program should not be a mandated requirement for licensure, credentialing, recredentialing, privileging, reimbursement, network participation, employment, or insurance panel participation.
16. Actively practicing physicians should be well-represented on specialty boards developing MOC.
17. Our AMA will include early career physicians when nominating individuals to the Boards of Directors for ABMS member boards.
18. MOC activities and measurement should be relevant to clinical practice.
19. The MOC process should be reflective of and consistent with the cost of development and administration of the MOC components, ensure a fair fee structure, and not present a barrier to patient care.
20. Any assessment should be used to guide physicians' self-directed study.
21. Specific content-based feedback after any assessment tests should be provided to physicians in a timely manner.
22. There should be multiple options for how an assessment could be structured to accommodate different learning styles.
23. Physicians with lifetime board certification should not be required to seek recertification.
24. No qualifiers or restrictions should be placed on diplomates with lifetime board certification recognized by the ABMS related to their participation in MOC.
25. Members of our House of Delegates are encouraged to increase their awareness of and participation in the proposed changes to physician self-regulation through their specialty organizations and other professional membership groups.
26. The initial certification status of time-limited diplomates shall be listed and publicly available on all American Board of Medical Specialties (ABMS) and ABMS Member Boards websites and physician certification databases. The names and initial certification status of time-limited diplomates shall not be removed from ABMS and ABMS Member Boards websites or physician certification databases even if the diplomate chooses not to participate in MOC.
27. Our AMA will continue to work with the national medical specialty societies to advocate for the physicians of America to receive value in the services they purchase for Maintenance of Certification from their specialty boards. Value in MOC should include cost effectiveness with full financial transparency, respect for physicians' time and their patient care commitments, alignment of MOC requirements with other regulator and payer requirements, and adherence to an evidence basis for both MOC content and processes.
(CME Rep. 16, A-09 Reaffirmed: CME Rep. 11, A-12 Reaffirmed: CME Rep. 10, A-12 Reaffirmed in lieu of Res. 313, A-12 Reaffirmed: CME Rep. 4, A-13 Reaffirmed in lieu of Res. 919, I-13 Appended: Sub. Res. 920, I-14 Reaffirmed: CME Rep. 2, A-15 Appended: Res. 314, A-15 Modified: CME Rep. 2, I-15 Reaffirmation A-16 Reaffirmed: Res. 309, A-16 Modified: Res. 307, I-16 Reaffirmed: BOT Rep. 05, I-16 Appended: Res. 319, A-17 Reaffirmed in lieu of: Res. 322, A-17 Modified: Res. 953, I-17)"

D-275.954, Maintenance of Certification and Osteopathic Continuous Certification
Our AMA will:
1. Continue to monitor the evolution of Maintenance of Certification (MOC) and Osteopathic Continuous Certification (OCC), continue its active engagement in discussions regarding their implementation, encourage specialty boards to investigate and/or establish alternative approaches for MOC, and prepare a yearly report to the House of Delegates regarding the MOC and OCC process.
2. Continue to review, through its Council on Medical Education, published literature and emerging data as part of the Council's ongoing efforts to critically review MOC and OCC issues.
3. Continue to monitor the progress by the American Board of Medical Specialties (ABMS) and its member boards on implementation of MOC, and encourage the ABMS to report its research findings on the issues surrounding certification and MOC on a periodic basis.
4. Encourage the ABMS and its member boards to continue to explore other ways to measure the ability of physicians to access and apply knowledge to care for patients, and to continue to examine the evidence supporting the value of specialty board certification and MOC.
5. Work with the ABMS to streamline and improve the Cognitive Expertise (Part III) component of MOC, including the exploration of alternative formats, in ways that effectively evaluate acquisition of new knowledge while reducing or eliminating the burden of a high-stakes examination.
6. Work with interested parties to ensure that MOC uses more than one pathway to assess accurately the competence of practicing physicians, to monitor for exam relevance and to ensure that MOC does not lead to unintended economic hardship such as hospital de-credentialing of practicing physicians.
7. Recommend that the ABMS not introduce additional assessment modalities that have not been validated to show improvement in physician performance and/or patient safety.
8. Work with the ABMS to eliminate practice performance assessment modules, as currently written, from MOC requirements.
9. Encourage the ABMS to ensure that all ABMS member boards provide full transparency related to the costs of preparing, administering, scoring and reporting MOC and certifying examinations.
10. Encourage the ABMS to ensure that MOC and certifying examinations do not result in substantial financial gain to ABMS member boards, and advocate that the ABMS develop fiduciary standards for its member boards that are consistent with this principle.
11. Work with the ABMS to lessen the burden of MOC on physicians with multiple board certifications, particularly to ensure that MOC is specifically relevant to the physician's current practice.
12. Work with key stakeholders to (a) support ongoing ABMS member board efforts to allow multiple and diverse physician educational and quality improvement activities to qualify for MOC; (b) support ABMS member board activities in facilitating the use of MOC quality improvement activities to count for other accountability requirements or programs, such as pay for quality/performance or PQRS reimbursement; (c) encourage ABMS member boards to enhance the consistency of quality improvement programs across all boards; and (d) work with specialty societies and ABMS member boards to develop tools and services that help physicians meet MOC requirements.
13. Work with the ABMS and its member boards to collect data on why physicians choose to maintain or discontinue their board certification.
14. Work with the ABMS to study whether MOC is an important factor in a physician's decision to retire and to determine its impact on the US physician workforce.
15. Encourage the ABMS to use data from MOC to track whether physicians are maintaining certification and share this data with the AMA.
16. Encourage AMA members to be proactive in shaping MOC and OCC by seeking leadership positions on the ABMS member boards, American Osteopathic Association (AOA) specialty certifying boards, and MOC Committees.

17. Continue to monitor the actions of professional societies regarding recommendations for modification of MOC.
18. Encourage medical specialty societies' leadership to work with the ABMS, and its member boards, to identify those specialty organizations that have developed an appropriate and relevant MOC process for its members.
19. Continue to work with the ABMS to ensure that physicians are clearly informed of the MOC requirements for their specific board and the timelines for accomplishing those requirements.
20. Encourage the ABMS and its member boards to develop a system to actively alert physicians of the due dates of the multi-stage requirements of continuous professional development and performance in practice, thereby assisting them with maintaining their board certification.
21. Recommend to the ABMS that all physician members of those boards governing the MOC process be required to participate in MOC.
22. Continue to participate in the National Alliance for Physician Competence forums.
23. Encourage the PCPI Foundation, the ABMS, and the Council of Medical Specialty Societies to work together toward utilizing Consortium performance measures in Part IV of MOC.
24. Continue to assist physicians in practice performance improvement.
25. Encourage all specialty societies to grant certified CME credit for activities that they offer to fulfill requirements of their respective specialty board's MOC and associated processes.
26. Support the American College of Physicians as well as other professional societies in their efforts to work with the American Board of Internal Medicine (ABIM) to improve the MOC program.
27. Oppose those maintenance of certification programs administered by the specialty boards of the ABMS, or of any other similar physician certifying organization, which do not appropriately adhere to the principles codified as AMA Policy on Maintenance of Certification.
28. Ask the ABMS to encourage its member boards to review their maintenance of certification policies regarding the requirements for maintaining underlying primary or initial specialty board certification in addition to subspecialty board certification, if they have not yet done so, to allow physicians the option to focus on maintenance of certification activities relevant to their practice.
29. Call for the immediate end of any mandatory, secured recertifying examination by the ABMS or other certifying organizations as part of the recertification process for all those specialties that still require a secure, high-stakes recertification examination.
30. Support a recertification process based on high quality, appropriate Continuing Medical Education (CME) material directed by the AMA recognized specialty societies covering the physician's practice area, in cooperation with other willing stakeholders, that would be completed on a regular basis as determined by the individual medical specialty, to ensure lifelong learning.
31. Continue to work with the ABMS to encourage the development by and the sharing between specialty boards of alternative ways to assess medical knowledge other than by a secure high stakes exam.
32. Continue to support the requirement of CME and ongoing, quality assessments of physicians, where such CME is proven to be cost-effective and shown by evidence to improve quality of care for patients.
33. Through legislative, regulatory, or collaborative efforts, will work with interested state medical societies and other interested parties by creating model state legislation and model medical staff bylaws while advocating that Maintenance of Certification not be a requirement for: (a) medical staff membership, privileging, credentialing, or recredentialing; (b) insurance panel participation; or (c) state medical licensure.
34. Increase its efforts to work with the insurance industry to ensure that maintenance of certification does not become a requirement for insurance panel participation.
35. Advocate that physicians who participate in programs related to quality improvement and/or patient safety receive credit for MOC Part IV.

36. Continue to work with the medical societies and the American Board of Medical Specialties (ABMS) member boards that have not yet moved to a process to improve the Part III secure, high-stakes examination to encourage them to do so.
37. Through its Council on Medical Education, continue to be actively engaged in following the work of the ABMS Continuing Board Certification: Vision for the Future Commission.
38. (a) Submit commentary to the American Board of Medical Specialties (ABMS) Continuing Board Certification: Vision for the Future initiative, asking that junior diplomates be given equal opportunity to serve on ABMS and its member boards; and (b) work with the ABMS and member boards to encourage the inclusion of younger physicians on the ABMS and its member boards.
39. Continue studying the certifying bodies that compete with the American Board of Medical Specialties and provide an update in the Council on Medical Education s annual report on maintenance of certification at the 2019 Annual Meeting.
(CME Rep. 2, I-15 Appended: Res. 911, I-15 Appended: Res. 309, A-16 Appended: CME Rep. 02, A-16 Appended: Res. 307, I-16 Appended: Res. 310, I-16 Modified: CME Rep. 02, A-17 Reaffirmed: Res. 316, A-17 Reaffirmed in lieu of: Res. 322, A-17 Appended: CME Rep. 02, A-18 Appended: Res. 320, A-18 Appended: Res. 957, I-18)

APPENDIX E

ABMS Committee on Continuing Certification (3C) Supplemental Information

1. List of ABMS pilots and substantive changes approved at 3C Meetings

APPROVED – Substantive Changes

Board	MOC Component	Pilot	Announced	Approved
American Board of Anesthesiology	Assessment of Knowledge, Judgment, and Skills	MOCA Minute	April 2015	April 2018
American Board of Thoracic Surgery	Assessment of Knowledge, Judgment, and Skills	Mastery Learning Process Using SESATS	April 2015	November 2015
American Board of Pathology	Assessment of Knowledge, Judgment, and Skills	Remote Proctoring	April 2015	July 2016
American Board of Dermatology	Improvement in Medical Practice	Practice Improvement Pilot	November 2015	April 2018
American Board of Obstetrics and Gynecology	Lifelong Learning and Self-Assessment, Knowledge, Judgment, and Skills	Integration of MOC Parts II & III	November 2015	April 2018
American Board of Emergency Medicine	Professionalism and Professional Standing	Improvements to Communication/Professionalism Requirement	April 2016	April 2018
American Board of Pediatrics	Assessment of Knowledge, Judgment, and Skills	MOCAPeds	November 2016	April 2018
American Board of Emergency Medicine	Lifelong Learning and Self-Assessment	Lifelong Learning and Self-Assessment Requirements Update	November 2018	November 2018

2. List of ABMS active pilots announced at 3C Meetings

ACTIVE - Pilots

Board	MOC Component	Pilot	Announced
American Board of Internal Medicine	Improvement in Medical Practice	Improvements to Part IV	April 2015
American Board of Neurological Surgery	Assessment of Knowledge, Judgment, and Skills	Cognitive Assessment/Learning Tool	November 2016
American Board of Radiology	Assessment of Knowledge, Judgment, and Skills	Online Longitudinal Assessment (OLA)	November 2016
American Board of Ophthalmology	Assessment of Knowledge, Judgment, and Skills	Quarterly Questions	November 2016
American Board of Pathology	Assessment of Knowledge, Judgment, and Skills	Longitudinal Assessment Program: CertLink	November 2016
American Board of Medical Genetics and Genomics	Assessment of Knowledge, Judgment, and Skills	Longitudinal Assessment Program: CertLink	April 2017
American Board of Nuclear Medicine	Assessment of Knowledge, Judgment, and Skills	Longitudinal Assessment Program: CertLink	April 2017
American Board of Allergy and Immunology	Assessment of Knowledge, Judgment, and Skills	Continuous Assessment Program	April 2017
American Board of Internal Medicine	Assessment of Knowledge, Judgment, and Skills	Knowledge Check-Ins	April 2017
American Board of Colon and Rectal Surgery	Assessment of Knowledge, Judgment, and Skills	Longitudinal Assessment Program: CertLink	November 2017
American Board of Physical Medical and Rehabilitation	Assessment of Knowledge, Judgment, and Skills	Longitudinal Assessment Program: CertLink	November 2017
American Board of Plastic Surgery	Lifelong Learning and Self-Assessment, Knowledge, Judgment, and Skills	Lifelong Learning and Self-Assessment and Knowledge, Judgment, and Skills	November 2017
American Board of Psychiatry and Neurology	Lifelong Learning and Self-Assessment, Knowledge, Judgment, and Skills	Lifelong Learning and Self-Assessment and Knowledge, Judgment, and Skills	November 2017
American Board of Surgery	Assessment of Knowledge, Judgment, and Skills	New Assessment Process	November 2017

American Board of Otolaryngology – Head and Neck Surgery	Assessment of Knowledge, Judgment, and Skills	Longitudinal Assessment Program: CertLink	April 2018
American Board of Orthopaedic Surgery	Assessment of Knowledge, Judgment, and Skills	Web-based Longitudinal Assessment (WLA)	April 2018
American Board of Emergency Medicine	Assessment of Knowledge, Judgment, and Skills	MyEMCert	April 2018
American Board of Dermatology	Assessment of Knowledge, Judgment, and Skills	Longitudinal Assessment Program: CertLink	July 2018
American Board of Family Medicine	Assessment of Knowledge, Judgment, and Skills	Family Medicine Certification Longitudinal Assessment	November 2018

APPENDIX F

Improvements to the American Board of Medical Specialties (ABMS) Part III, Assessment of Knowledge, Judgment, and Skills and Part IV, Improvement in Medical Practice*

American Board of:	Original Format	New Models/Innovations
Allergy and Immunology (ABAI) abai.org	**Part III:** Computer-based, secure exam was administered at a proctored test center once a year. Diplomates were required to pass the exam once every 10 years.	**Part III:** In 2018, ABAI-Continuous Assessment Program Pilot was implemented in place of current exam: • A 10-year program with two 5-year cycles; • Diplomates take exam where and when it is convenient; • Open-book annual exam with approximately 80 questions; • Mostly article-based with some core questions during each 6-month cycle. Diplomates must answer three questions for each of ten journal articles in each cycle. The articles are posted in January and July and remain open for 6 months. • Questions can be answered independently for each article; • Diplomate feedback required on each question; • Opportunity to drop the two lowest 6-month cycle scores during each 5-year period to allow for unexpected life events; and • Ability to complete questions on PCs, laptops, MACs, tablets, and smart phones by using the new diplomate dashboard accessed via the existing ABAI Web Portal page.
	Part IV[2]: ABAI diplomates receive credit for participation in registries.	**Part IV[2]:** In 2018, new Part IV qualifying activities provided credit for a greater range of improvement in medical practice (IMP) activities that physicians complete at their institutions and/or individual practices. A practice assessment/quality improvement (QI) module must be completed once every 5 years.
Anesthesiology (ABA) theaba.org	**Part III:** MOCA 2.0 introduced in 2014 to provide a tool for ongoing low-stakes assessment with more extensive, question-specific feedback. Also provides focused content that could be reviewed periodically to refresh knowledge and document cognitive expertise.	**Part III:** MOCA Minute® replaced the MOCA exam. Diplomates must answer 30 questions per calendar quarter (120 per year), no matter how many certifications they are maintaining.

	All diplomates with time-limited certification in anesthesiology that expired on or before December 31, 2015 and diplomates whose subspecialty certificates expired on or before December 31, 2016, must complete the traditional MOCA® requirements before they can register for MOCA 2.0®.	
	Part IV[2]: Traditional MOCA requirements include completion of case evaluation and simulation course during the 10-year MOCA cycle. One activity must be completed between Years 1 to 5, and the second between Years 6 to 10. An attestation is due in Year 9.	**Part IV[3-4]:** ABA is adding and expanding multiple activities for diplomates to demonstrate that they are participating in evaluations of their clinical practice and are engaging in practice improvement. Diplomates may choose activities that are most relevant to their practice; reporting templates no longer required for self-report activities; simulation activity no longer required following diplomate feedback that it was expensive and time-consuming.
Colon and Rectal Surgery (ABCRS) abcrs.org	**Part III:** Computer-based secure exam administered at a proctored test center once a year (in May). Diplomates must pass the exam once every 10 years.	**Part III[1]:** ABCRS is exploring ways to modify the exam experience to provide a more consistent assessment process and to replace the exam as it presently is administered. The first diplomates enrolled in CertLink™ MOC included those sitting for the ABCRS certifying exam in September 2017. These diplomates started CertLink™ MOC in the Spring of 2018. Other diplomates will be able to enroll in the near future. The computer-based secure exam will not be offered after 2019.
	Part IV: Requires ongoing participation in a local, regional, or national outcomes registry or quality assessment program.	**Part IV[3-4]:**
Dermatology (ABD) abderm.org	**Part III:** Computer-based secure modular exam administered at a proctored test center twice a year or by remote proctoring technology. Diplomates must pass the exam once every 10 years. Test preparation material available 6 months before the exam at no cost. The material includes diagnoses from which the general dermatology clinical images will be drawn and questions that will be used to generate the subspecialty modular exams.	**Part III[1]:** ABD successfully completed trials employing remote proctoring technology to monitor exam administration in the diplomates' homes or offices. ABD is developing a longitudinal assessment as an alternative to the traditional MOC exam (pilot scheduled for 2019, launch tentatively scheduled for 2020).

	Examinees are required to take the general dermatology module, consisting of 100 clinical images to assess diagnostic skills, and can then choose among 50-item subspecialty modules.	
	Part IV[2]: Tools diplomates can use for Part IV include: • Focused practice improvement modules. • ABD's basal cell carcinoma registry tool. Partnering with specialty society to transfer any MOC-related credit directly to Board.	**Part IV:** ABD developed more than 40 focused practice improvement modules that are simpler to complete and cover a wide range of topics to accommodate different practice types. Peer and patient communication surveys are now optional.
Emergency Medicine (ABEM) abem.org	**Part III:** ABEM's ConCert™, computer-based, secure exam administered at a proctored test center twice a year. Diplomates must pass the exam once every 10 years.	**Part III:** In 2020, a second way to demonstrate physicians continue to possess the knowledge and cognitive skills of an ABEM-certified emergency physician—MyEMCert—will be piloted. MyEMCert will consist of: Shorter, more frequent tests: Each test will assess one or more specific content areas relevant to the clinical practice of emergency medicine, such as cardiovascular disorders or trauma. The tests will be about an hour long, with. the ability to retake a test again if it is not passed the first time, providing: physicians with a clearer idea of what topics need to be reviewed. Physicians will take the test remotely and have access to references.
	Part IV[2]: Physicians may complete practice improvement efforts related to any of the measures or activities listed on the ABEM website. Others that are not listed, may be acceptable if they follow the four steps ABEM requirements.	**Part IV:** ABEM is developing a pilot program to incorporate clinical data registry. ABEM diplomates receive credit for improvements they are making in their practice setting.
Family Medicine (ABFM) theabfm.org	**Part III:** Computer-based secure exam administered at a proctored test center twice a year or by remote proctoring technology. Diplomates must pass the exam once every 10 years. Improving relevance of exam by using national study of care content in family medicine practices. Providing feedback to residents and practicing physicians about the "anatomy" of the exam and their specific knowledge gaps (this effort has resulted in significant	**Part III:** In December 2018, the ABFM launched a pilot to study the feasibility and validity of an alternative to the 10-year examination, called Family Medicine Certification Longitudinal Assessment (FMCLA). Limited to diplomates who are currently certified and are in the tenth year of certification due to end December 31, 2019, this approach is more aligned with adult learning principles, and when coupled with modern technology, promotes more enduring learning, retention, and

	improvement in passing rates and improved feedback regarding relevance).	transfer of knowledge than episodic examinations.
	Part IV[2]: IMP Projects include: • Collaborative Projects: Structured projects that involve physician teams collaborating across practice sites and/or institutions to implement strategies designed to improve care. • Projects Initiated in the Workplace: These projects are based on identified gaps in quality in a local or small group setting. • Web-based Activities: Self-paced activities that physicians complete within their practice setting (these activities are for physicians, who do not have access to other practice improvement initiatives).	**Part IV[2-3]:** ABFM developed and launched the national primary care registry (PRIME) to reduce time and reporting requirements.
Internal Medicine (ABIM) abim.org	**Part III:** Computer-based secure exam administered at a proctored test center. Diplomates must pass the exam once every 10 years. ABIM introduced grace period for physicians to retry assessments for additional study and preparation if initially unsuccessful.	**Part III:** In 2018, two assessment options were offered: 1) Certified physicians (internal medicine, cardiovascular disease, geriatric medicine, endocrinology, diabetes, and metabolism, gastroenterology, hematology, infectious disease, nephrology, pulmonary disease, and rheumatology with more specialties to roll out in 2020) will be eligible to take the Knowledge Check-In, a new 2-year open-book (access to *UpToDate*®) assessment with immediate performance feedback. Assessments can be taken at the physician's home or office or at a computer testing facility instead of taking the long-form exam every 10 years at a testing facility. Those who meet a performance standard on shorter assessments will not need to take the 10-year exam again to remain certified. 2) Diplomates can also choose to take a long-form assessment given every 10 years. This option is the same as the current 10-year exam, but it will include open-book access (to *UpToDate*®) that physicians requested. *ABIM is also working with specialty societies to explore the development of collaborative pathways through which*

		physicians can maintain board certification.
	Part IV[2]: Practice assessment/QI activities include identifying an improvement opportunity in practice, implementing a change to address that opportunity, and measuring the impact of the change. Diplomates can earn MOC points for many practice assessment/QI projects through their medical specialty societies, hospitals, medical groups, clinics, or other health-related organizations.	**Part IV:** Increasing number of specialty-specific IMP activities recognized for credit (activities that physicians are participating in within local practice and institutions).
Medical Genetics and Genomics (ABMGG) abmgg.org	**Part III:** Computer-based secure exam administered at a proctored test center once a year (August). Diplomates must pass the exam once every 10 years.	**Part III[1]:** In 2018, CertLink Pilot Program launched: • Twenty-four questions distributed every 6 months throughout pilot period, regardless of number of specialties in which a diplomate is certified; • All questions must be answered by end of each 6-month timeframe (~5 minutes allotted per question); • Resources allowed, collaboration with colleagues not allowed; • Realtime feedback and performance provided for each question; and • "Clones" of missed questions will appear in later timeframes to help reinforce learning.
	Part IV[2]: Diplomates can choose from the list of options to complete practice improvement modules in areas consistent with the scope of their practice.	**Part IV[3-4]:** ABMGG is developing opportunities to allow diplomates to use activities already completed at their workplace to fulfill certain requirements. Expanding accepted practice improvement activities for laboratorians.
Neurological Surgery (ABNS) abns.org	**Part III:** The 10-year secure exam can be taken from any computer, i.e., in the diplomate's office or home. Access to reference materials is not restricted; it is an open book exam. On applying to take the exam, a diplomate must assign a person to be his or her proctor. Prior to the exam, that individual will participate in an on-line training session and "certify" the exam computers.	**Part III:** In 2018, the 10-year exam was replaced with an annual adaptive cognitive learning tool, Core Neurosurgical Knowledge: • Open book exam focusing on 30 or so evidence-based practice principles critical to emergency, urgent, or critical care; • Shorter, relevant, and more focused questions than the prior exam;

		• Web-based format with 24/7 access from the diplomates' home or office; and • Immediate feedback to each question and references with links and/or articles are provided.
	Part IV: Diplomates receive credit for documented participation in an institutional QI project.	**Part IV:** Diplomates are required to participate in a meaningful way in morbidity and morality conferences at his or her primary hospital. For those diplomates participating in the Pediatric Neurosurgery, CNS-ES, NeuCC focused practice programs, a streamlined case log is required to confirm that their practice continues to be focused and the diplomate is required to complete a learning tool that includes core neurosurgery topics and an additional eight evidence-based concepts critical to providing emergency, urgent, or critical care in their area of focus.
Nuclear Medicine (ABNM) abnm.org	**Part III:** Computer-based secure exam administered at a proctored test center once a year (October). Diplomates must pass the exam once every 10 years.	**Part III[1]:** Diplomates can choose between the 10-year exam or a longitudinal assessment pilot program (CertLink™). CertLink™ periodically delivers nuclear medicine questions with detailed explanations and references directly to diplomates.
	Part IV: Diplomates must complete one of the three following requirements each year. 1) Attestation that the diplomate has participated in QI activities as part of routine clinical practice, such as participation in a peer review process, attendance at tumor boards, or membership on a radiation safety committee. 2) Participation in an annual practice survey related to approved clinical guidelines released by the ABNM. The survey has several questions based on review of actual cases. Diplomates receive a summary of the answers provided by other physicians that allows them to compare their practice to peers. 3) Improvement in medical practice projects designed by diplomates, or provided by professional groups such as the Society of Nuclear Medicine and Molecular Imaging (SNMMI). Project areas may include medical care provided	**Part IV[3-4]:** ABNM recognizes QI activities in which physicians participate in their clinical practice.

	for common/major health conditions, physician behaviors, such as communication and professionalism, as they relate to patient care, and many others. The projects typically follow the model of Plan-Do-Study-Act. The ABNM has developed a few IMP modules for the SNMMI, Alternatively, diplomates may design their own project.	
Obstetrics and Gynecology (ABOG) abog.org	**Part III:** The secure, external assessment is offered in the last year of each ABOG diplomate's 6-year cycle in a modular test format; diplomates can choose two selections that are the most relevant to their current practice.	**Part III:** ABOG completed a pilot program and integrated the article-based self-assessment (Part II) and external assessment (Part III) requirements, allowing diplomates to continuously demonstrate their knowledge of the specialty. The pilot allowed diplomates to earn an exemption from the current computer-based exam in the sixth year of the program if they reach a threshold of performance during the first 5 years of the self-assessment program. In 2019, diplomates can choose to take the 6-year exam or participate in Performance Pathway, an article-based self-assessment (with corresponding questions) which showcases new research studies, practice guidelines, recommendations, and up-to-date reviews. Diplomates who participate in Performance Pathway are required to read a total of 180 selected articles and answer 720 questions about the articles over the 6-year MOC cycle.
	Part IV[2]: Diplomates required to participate in one of the available IMP activities yearly in MOC Years 1-5. ABOG will consider structured QI projects (IMP modules, QI efforts, simulation courses) in obstetrics and gynecology for Part IV credit. These projects must demonstrate improvement in care and be based on accepted improvement science and methodology. Newly developed QI projects from organizations with a history of successful QI projects are also eligible for approval.	**Part IV:** ABOG recognizes work with QI registries for credit. ABOG continues to expand the list of approved activities which can be used to complete the Part IV. The number of hours required for approval of simulation course credit has been decreased to 4 hours of instruction.

Ophthalmology (ABO) abop.org	**Part III:** The Demonstration of Ophthalmic Cognitive Knowledge (DOCK) high-stakes, 10-year exam administered through 2018.	**Part III:** In 2019, Quarterly Questions™ will replace the DOCK Examination for all diplomates: • Will deliver 50 questions (40 knowledge-based and 10 article-based); • Offered remotely at home or office through computer, tablet, or mobile apps; • The questions should not require preparation in advance, but a content outline for the multiple-choice questions will be available; • Diplomates will receive instant feedback and recommendations for resources related to gaps in knowledge; and • Key ophthalmic journal articles with questions focused on the application of this information to patient care. The journal portion will require reading five articles from a list of 30 options.
	Part IV[2]: Diplomates whose certificates expire on or before December 31, 2020 must complete one of the following options; all other diplomates complete two activities: 1) Read QI articles through Quarterly Questions; 2) Choose a QI CME activity; 3) Create an individual IMP activity; or 4) Participate in the ABMS multi-specialty portfolio program pathway.	**Part IV[3-4]:** Diplomates can choose to: 1) Design a registry-based IMP Project using their AAO IRIS® Registry Data; 2) Create a customized, self-directed IMP activity; or 3) Participate in the ABMS multi-specialty portfolio program through their institution.
Orthopaedic Surgery (ABOS) abos.org	**Part III:** Computer-based secure modular exam administered at a proctored test center. Diplomates must pass the exam once every 10 years. The optional oral exam is given in Chicago in July. Diplomates without subspecialty certifications can take practice-profiled exams in orthopaedic sports medicine and surgery of the hand. General orthopaedic questions were eliminated from the practice-profiled exams so diplomates are only tested in areas relevant to their practice. Detailed blueprints are being produced for all exams to provide additional information for candidates to prepare for and complete the exams.	**Part III:** In 2019, a new web-based longitudinal assessment program (ABOS WLA) the Knowledge Assessment, will be piloted. ABOS diplomates may choose this pathway instead of an ABOS computer-based or oral recertification 10-year exam: • Offered remotely at home or office through computer, tablet, or mobile apps; • Thirty questions must be answered between April 15, 2019 and May 20, 2019 (two questions will come from each Knowledge Source). • The assessment is open-book and diplomates can use the Knowledge Sources, if the questions are answered within the 3-minute window and that the answer

	Eight different practice-profiled exams offered to allow assessment in the diplomate's practice area.	represents the diplomate's own work.
	Part IV[2]: Case lists allow diplomates to review their practice including adhering to accepted standards, patient outcomes, and rate and type of complications. Case list collection begins on January 1st of the calendar year that the diplomate plans to submit their recertification application, and is due by December 1. The ABOS recommends that this be done in Year 7 of the 10-year MOC Cycle, but it can be done in Year 8 or 9. A minimum of 35 cases is required for the recertification candidate to sit for the recertification exam of their choice. Diplomates receive a feedback report based on their submitted case list.	**Part IV[3-4]:** ABOS is streamlining the case list entry process to make it easier to enter cases and classify complications.
Otolaryngology – Head and Neck Surgery (ABOHNS) aboto.org	**Part III:** Computer-based secure modular exam administered at a proctored test center. Diplomates must pass the exam once every 10 years.	**Part III[1]:** ABOHNS is piloting a CertLink™-based longitudinal assessment in 2019 (20 questions per quarter) to explore and evaluate assessment methods to provide immediate, personalized feedback as an alternative to the high-stakes exam. Diplomates whose certificates expire in 2019 are eligible to participate on a voluntary basis.
	Part IV[2]: The three components of Part IV include: 1) A patient survey; 2) A peer survey; and 3) A registry that will be the basis for QI activities.	**Part IV:** ABOHNS is partnering with the American Academy of Otolaryngology-Head and Neck Surgery in their development of a RegentSM registry. Selected data will be extracted from RegentSM for use in practice improvement modules that diplomates can use to meet IMP requirements.
Pathology (ABPath) abpath.org	**Part III:** Computer-based secure modular exam administered at the ABP Exam Center in Tampa, Florida twice a year (March and August). Remote computer exams can be taken anytime 24/7 that the physician chooses during the assigned 2-week period (spring and fall) from their home or office.	**Part III[1]:** The ABPath CertLink® pilot program is available for all diplomates: • Diplomates can log in anytime to answer 15 multiple-choice questions assigned per quarter; • Each question must be answered within 5 minutes; • Can use any resources (e.g. internet, textbooks, journals) except another person; • Immediate feedback on whether each question is answered correctly

	Physicians can choose from more than 90 modules, covering numerous practice areas for a practice-relevant assessment. *Diplomates must pass the exam once every 10 years.*	or incorrectly, with a short narrative about the topic (critique), and references; and • Customization allows diplomates to select questions from practice (content) areas relevant to their practice.
	Part IV[2]: Diplomates must participate in at least one inter-laboratory performance improvement and quality assurance programs per year appropriate for the spectrum of anatomic and clinical laboratory procedures performed in that laboratory.	**Part IV[3-4]:**
Pediatrics (ABP) abp.org	**Part III:** Computer-based secure exam administered at a proctored test center. Diplomates must pass the exam once every 10 years.	**Part III:** In 2019 Maintenance of Certification Assessment for Pediatrics (MOCA-Peds), a new testing platform with shorter and more frequent assessments, will be rolled out • A series of questions released through mobile devices or a web browser at regular intervals; • Twenty multiple choice questions that are available quarterly and may be answered at any time during the quarter; • Immediate feedback and references; • Resources (i.e., internet, books) can be used when taking the exam; and • Allows for questions to be tailored to the pediatrician's practice profile. Physicians will provide feedback on individual questions so the exam can be continuously improved. Those who wish to continue taking the exam once every 5 years in a secure testing facility will be able to do so.
	Part IV[2]: Diplomates must earn at least 40 points every 5 years, in one of the following activities: • Local or national QI projects • Diplomates' own project • National Committee for Quality Assurance Patient-Centered Medical Home or Specialty Practice • Institutional QI leadership • Online modules (PIMS)	**Part IV:** ABP is enabling new pathways for pediatricians to claim Part IV QI credit for work they are already doing. These pathways are available to physicians who are engaged in QI projects alone or in groups, and include a pathway for institutional leaders in quality to claim credit for their leadership. ABP is also allowing trainees (residents and fellows) to "bank" MOC credit for quality improvement activities in which

		they participate. The pediatricians supervising these trainees also may claim MOC credit for qualifying projects.
Physical Medicine and Rehabilitation (ABPMR) abpmr.org	**Part III:** Computer-based secure exam administered at a proctored test center. Diplomates must pass the exam once every 10 years. Released MOC 100, a set of free practice questions pulled directly from the ABPMR exam question banks to help physicians prepare for the exam.	**Part III[1]:** ABPMR is conducting a CertLink™-based longitudinal assessment pilot through 2020 to explore and evaluate shorter, more frequent assessment methods and provision of immediate, personalized feedback as an alternative to the high-stakes exam. ABPMR is also working with its specialty society to produce clinical updates that will integrate with the longitudinal assessment tool.
	Part IV[2]: Guided practice improvement projects are available through ABPMR.	**Part IV[3-4]:** ABPMR is introducing several free tools to complete an IMP project, including: simplified and flexible template to document small improvements and educational videos, infographic, and enhanced web pages. ABPMR is seeking approval from the National Committee for Quality Assurance Patient-Centered Specialty Practice Recognition for Part IV IMP credit. ABPMR is also working with its specialty society to develop relevant registry-based QI activities.
Plastic Surgery (ABPS) abplasticsurgery.org	**Part III:** Computer-based secure exam administered at a proctored test center once a year (October). Diplomates must pass the exam once every 10 years. Modular exam to ensure relevance to practice. ABPS offers a Part III Study Guide with multiple choice question items derived from the same sources used for the exam.	**Part III:** Piloting online delivery of Part III exam in place of centralized in-person testing center to reduce costs and time away from practice. Diplomates will be given immediate feedback on answers and offered an opportunity to respond again. If successful, this pilot may replace the high-stakes exam. Instituting online longitudinal learning program that will assess the physician's knowledge, provide immediate feedback, and reinforce areas of knowledge deficiency throughout the 5-year cycle.
	Part IV[2]: ABPS provides Part IV credit for registry participation. ABPS also allows Part IV credit for IMP activities that a diplomate is engaged in	**Part IV[3-4]:** Allowing MOC credit for Improvement in Medical Practice activities that a diplomate is engaged in through their hospital or institution.

	through their hospital or institution. Diplomates are asked to input data from 10 cases from any single index procedure every 3 years, and ABPS provides feedback on diplomate data across five index procedures in four subspecialty areas.	Physician participation in one of four options can satisfy the diplomate's Practice Improvement Activity: • Quality improvement publication • Quality improvement project • Registry participation • Tracer procedure log
Preventive Medicine (ABPM) theabpm.org	**Part III:** In-person, pencil-and-paper, secure exam administered at secure test facility. MOC exams follow the same content outline as the initial certification exam (without the core portion). *In 2016, new multispecialty subspecialty of Addiction Medicine was established. In 2017, Addiction Medicine subspecialty certification exam was administered to diplomates of any of the 24 ABMS member boards who meet the eligibility requirements.*	**Part III:** Changes to the ABPM MOC exam are not being considered at this time.
	Part IV[2]: Diplomates must complete two IMP activities. One of the activities must be completed through a preventive medicine specialty or subspecialty society (ACOEM, ACPM, AMIA, AsMA, or UHMS).	**Part IV[3-4]:** Partnering with specialty societies to design quality and performance improvement activities for diplomates with population-based clinical focus (i.e., public health).
Psychiatry and Neurology (ABPN) abpn.com	**Part III:** Computer-based secure exam administered at a proctored test center. Diplomates must pass the exam once every 10 years. ABPN is developing MOC exams with committees of clinically active diplomates to ensure relevance to practice. ABPN is also enabling diplomates with multiple certificates to take all of their MOC exams at once and for a reduced fee. Grace period so that diplomates can retake the exam.	**Part III:** ABPN is implementing a Part III pilot program through 2021 to allow physicians who read lifelong learning articles and demonstrate learning by high performance on the questions accompanying the article, to earn exemption from the 10-year MOC high-stakes exam.
	Part IV[2]: Diplomates satisfy the IMP requirement by completing one of the following: 1) Clinical Module: Review of one's own patient charts on a specific topic (diagnosis, types of treatment, etc.). 2) Feedback Module: Obtain personal feedback from either peers or patients regarding your own clinical performance using questionnaires or surveys.	**Part IV[3-4]:** ABPN is allowing Part IV credit for IMP and patient safety activities diplomates complete in their own institutions and professional societies, and those completed to fulfill state licensure requirements. Diplomates participating in registries, such as those being developed by the American Academy of Neurology and the American Psychiatric Association, can have 8 hours of required self-assessment CME waived.

Radiology (ABR) theabr.org	**Part III:** Computer-based secure modular exam administered at a proctored test center. Diplomates must pass the exam once every 10 years.	**Part III:** An Online Longitudinal Assessment (OLA) model replaces the 10-year traditional exam. OLA includes modern and more relevant adult learning concepts to provide psychometrically valid sampling of the diplomate's knowledge. Diplomates must create a practice profile of the subspecialty areas that most closely fit what they do in practice, as they do now for the modular exams. Diplomates will receive weekly emails with links to questions relevant to their registered practice profile. Questions may be answered singly or, for a reasonable time, in small batches, in a limited amount of time. Diplomates will learn immediately whether they answered correctly or not and will be presented with the question's rationale, a critique of the answers, and brief educational material. Those who answer questions incorrectly will receive future questions on the same topic to gauge whether they have learned the material.
	Part IV[2]: Diplomates must complete at least one practice QI project or participatory quality improvement activity in the previous 3 years at each MOC annual review. A project or activity may be conducted repeatedly or continuously to meet Part IV requirements.	**Part IV[3-4]:** ABR is automating data feeds from verified sources to minimize physician data reporting. ABR is also providing a template and education about QI to diplomates with solo or group projects.
Surgery (ABS) absurgery.org	**Part III:** Computer-based secure exam administered at a proctored test center. Diplomates must pass the exam once every 10 years. Transparent exam content, with outlines, available on the ABS website and regularly updated. The ABS is coordinating with the American College of Surgeons and other organizations to ensure available study materials align with exam content.	**Part III:** In 2018, the ABS began offering shorter, more frequent, open-book, modular, lower-stakes assessments required every 2 years in place of the high-stakes exam. The new assessment is being introduced for general surgery, with other ABS specialties launching over the next few years: • Diplomates will select from four practice-related topics: general surgery, abdomen, alimentary tract, or breast;

		• More topics based on feedback from diplomates and surgical societies are being planned; • Diplomates can take the assessment through their own computer at a time and place of their choosing within the assessment window; • 40 questions total (20 core surgery, 20 practice-related; • Open book (topics and references provided in advance); • Individual questions are untimed (with 2 weeks to complete); and • Immediate feedback and results (two opportunities to answer a question correctly).
	Part IV[2]: The ABS allows ongoing participation in a local, regional or national outcomes registry or quality assessment program, either individually or through the diplomate's institution. Diplomates must describe how they are meeting this requirement—no patient data is collected. The ABS audits a percentage of submitted forms each year.	**Part IV:** The ABS allows multiple options for registry participation, including individualized registries, to meet IMP requirements.
Thoracic Surgery (ABTS) abts.org	**Part III:** Remote, secure, computer-based exams can be taken any time 24/7 that the physician chooses during the assigned 2-month period (September-October) from their home or office. Diplomates must pass the exam once every 10 years. Modular exam, based on specialty, and presented in a self-assessment format with critiques and resources made available to diplomates.	**Part III:** The ABTS developed a web-based self-assessment tool (SESATS) that includes all exam material, instant access to questions, critiques, abstracts and references.
	Part IV[2]: ABTS diplomates must complete at least one practice quality improvement project within 2 years, prior to their 5-year and 10-year milestones. There are several pathways by which diplomates may meet these requirements: individual, group or institutional.	**Part IV[3-4]:**
Urology (ABU) abu.org	**Part III:** Computer-based secure exam administered at a proctored test center once a year (October). Diplomates must pass the exam once every 10 years. Clinical management emphasized on the exam. Questions are derived from the American Urological Association (AUA) Self-Assessment Study Program booklets	**Part III:** The knowledge assessment portion of the lifelong learning program will not be used as a primary single metric that influences certificate status but rather to help the diplomate to identify those areas of strength versus weakness in their medical knowledge (knowledge that is pertinent to their practice). To that end ABU will continue the

	from the past five years, AUA Guidelines, and AUA Updates. Diplomates required to take the 40-question core module on general urology, and choose one of four 35-question content specific modules. ABU provides increased feedback to reinforce areas of knowledge deficiency.	modular format for the lifelong learning knowledge assessment. The knowledge assessment will be based on criterion referencing, thus allowing the identification of two groups, those who unconditionally pass the knowledge assessment and those who are given a conditional pass. The group getting a conditional pass will consist of those individuals who score in the band of one standard error of measurement above the pass point down to the lowest score. That group would be required to complete additional CME in the areas where they demonstrate low scores. After completion of the designated CME activity, they would continue in the lifelong learning process and the condition of their pass would be lifted.
	Part IV[2]: Completion of Practice Assessment Protocols. ABU uses diplomate practice logs and diplomate billing code information to identify areas for potential performance or QI.	**Part I[3-4]:** ABU allows credit for registry participation (i.e., participation in the MUSIC registry in Michigan, and the AUA AQUA registry). Another avenue to receive credit is participation in the ABMS multi-specialty portfolio program (this is more likely to be used by Diplomates who are part of a large health system, e.g. Kaiser, or those in academic practices).

* The information in this table is sourced from ABMS Member Board websites and is current as of January 15, 2019.

[1] Utilizing CertLink™, an ABMS web-based platform that leverages smart mobile technology to support the design, delivery, and evaluation of longitudinal assessment programs, some of which launched in 2017-2018. More information is available at: abms.org/news-events/american-board-of-medical-specialties-announces-development-of-new-web-based-platform/ (accessed 1-2-19).

[2] Participates in the ABMS Portfolio Program.

[3] Improving alignment between national value-based reporting requirements and continuing certification programs.

[4]Aligning MOC activities with physician well-being, public health initiatives, and national quality strategies via the ABMS MOC Directory.

APPENDIX G

Alternative Pathways to Board Recertification*

Recertification Program	Recertification Requirements	Exceptions
American Board of Medical Specialties (ABMS) Maintenance of Certification (MOC) The ABMS (abms.org), founded in 1933 as the Federation of Independent Specialty Boards, bases its certification on collective standards of training, experience, and ethical behavior. Each of the ABMS member boards develops its specific standards for certification, and together they certify more than 880,000 allopathic and osteopathic physicians in 40 primary specialties and 85 subspecialties. The wide-scale use of ABMS board certification is reflected in both training and delivery systems, and based on core competencies developed and adopted by the ABMS and the Accreditation Council for Graduate Medical Education (ACGME): practice-based learning and improvement, patient care and procedural skills, systems-based practice, medical knowledge, interpersonal and communication skills, and professionalism.	The continuing board certification requirements differ among the ABMS member boards; however, at minimum, to be eligible for recertification, diplomates must meet the standards in each of these areas: • Part I: Professionalism and Professional Standing (maintain a valid, unrestricted medical license) • Part II: Lifelong Learning and Self-Assessment (complete a minimum of 25 continuing medical education [CME] credits per year [averaged over 2 to 5 years]) • Part III: Assessment of Knowledge, Judgment, and Skills (pass a secure examination to assess cognitive skills at periodic intervals) • Part IV: Improvement in Medical Practice (participate in practice assessment and quality improvement every 2 to 5 years)	Diplomates with lifetime (grandfathered) certification are not required to participate in the ABMS MOC program.
American Osteopathic Association (AOA) Osteopathic Continuous Certification (OCC) The AOA Bureau of Osteopathic Specialists (AOA-BOS) (osteopathic.org/inside-aoa/development/aoa-board-certification/Pages/bos-history.aspx) was organized in 1939 as the Advisory Board for Osteopathic Specialists to meet the needs resulting from the growth of specialization in the osteopathic profession. Today, 18 AOA-BOS specialty certifying boards offer osteopathic physicians the option to earn board certification and recertification in numerous specialties and subspecialties. As of December 31, 2007, 31,762 physicians were certified by the AOA, and 1,357 diplomates completed OCC.	Osteopathic physicians who hold a time-limited certificate are required to participate in the following five components of OCC to maintain osteopathic board certification: • Component 1 - Active Licensure (maintain a valid, active license to practice medicine in one of the 50 states, and adhere to the AOA's Code of Ethics) • Component 2 – Life Long Learning/CME (fulfill a minimum of 120 - 150 hours of CME credit during each 3-year CME cycle) • Component 3 - Cognitive Assessment (pass one, or more, proctored examinations to assess specialty medical knowledge and core competencies in the provision of health care) • Component 4 - Practice Performance Assessment and Improvement (engage in continuous quality improvement through comparison of personal practice performance measured against national standards for the physician's medical specialty) • Component 5 - Continuous AOA Membership	Osteopathic physicians who hold non-time-limited (non-expiring) certificates are not required to participate in OCC. To maintain their certification, they must continue to meet licensure, membership, and CME requirements (120-150 credits every three-year CME cycle, 30 of which are in AOA CME Category 1A).

American Board of Physician Specialties (ABPS) ABPS (abpsus.org) is a multi-specialty board certifying body of the American Association of Physician Specialists (AAPS), Inc., which was founded by surgeons in 1950. The member boards of the ABPS offer specialty certification examinations for qualified allopathic and osteopathic physicians. The ABPS is governed by a board of directors and chief executive officer, who oversee eligibility requirements and testing standards. The 12-member boards of the ABPS offer certification in 18 specialties. To achieve recertification, an ABPS board certified physician must participate in a regular schedule of maintenance and enhancement of competency (MAEC) in his or her specialty.	The eligibility requirements for recertification differ among the ABPS member boards; however, at minimum, the boards require that physicians meet the following MAEC requirements every 8 years: • Maintain a full and unrestricted license in every state where he or she practices • Complete a non-remedial medical ethics program • Complete 400 CME hours during the 8-year cycle, and must have had at least an average of 25 CME hours per year in his or her specialty (also, an average of 50 questions of self-assessment CME examinations [as approved by the physician's certifying board] must be completed annually until the final year of the 8-year cycle.) • Pass a 100-question, securely administered, written examination in the final year of the 8-year cycle	Physician recertification through the ABMS and the AOA-BOS does not preclude practicing physicians who qualify from seeking recertification through the ABPS. Many of the ABPS Diplomates in leadership positions are dual-certified through the ABPS and either the ABMS or AOA-BOS.
National Board of Physicians and Surgeons (NBPAS) The NBPAS (nbpas.org) offers a two-year recertification program in all current ABMS specialties for physicians (MDs and DOs) who meet its criteria. The NBPAS has more than 6,000 participants, and is working to gain acceptance by hospitals and payers. As of January 1, 2018, 70 hospitals (credentials committees, medical executive committees and/or hospital boards) had voted to accept the NBPAS as an alternative to ABMS recertification.	To be eligible for NBPAS recertification, candidates must meet the following criteria: • Previous certification by ABMS/AOA member board • Valid medical license (hold a valid, unrestricted license to practice medicine in at least one U.S. state; candidates who only hold a license outside of the U.S. must provide evidence of an unrestricted license from a valid non-U.S. licensing body) • Submission of CME credits (complete a minimum of 50 hours of CME within the past 24 months; CME must be related to one or more of the specialties in which the candidate is applying; and re-entry for physicians with lapsed certification requires 100 hours of CME within the past 24 months) • Active hospital privileges (for some specialties, i.e., interventional cardiology, electrophysiology, surgical specialties, must have active privileges to practice that specialty in at least one U.S. hospital licensed by a nationally recognized credentialing organization with authority from the Centers for Medicare & Medicaid Services (CMS), i.e., The Joint Commission, Healthcare Facilities Accreditation Program, and DNV [Det Norske Veritas] Healthcare) • Medical staff appointment/membership (a candidate who has had their medical staff appointment/ membership or clinical privileges in the specialty for which they are seeking certification involuntarily revoked and not reinstated, must have subsequently maintained medical staff appointment/membership or clinical privileges for at least 24 months in	Physicians in or within two years of training are exempt from CME requirements. Physicians who are grandfathered and whose certification has not, by definition, expired must have completed at least 50 hours (not 100 hours) of CME in the past 24 months.

	another U.S. hospital licensed by a nationally recognized credentialing organization with authority from CMS [as listed above])	
American Board of Facial Plastic and Reconstructive Surgery (ABFPRS) The ABFPRS (abfprs.org) was established in 1986 to improve the quality of medical and surgical treatment available to the public by examining for professional expertise in facial plastic and reconstructive surgery. Since January 2001, the certificates issued by the ABFPRS been valid for 10 years only. Diplomates who were certified since then and who want to maintain their certification must participate in the ABFPRS Maintenance of Certification in Facial Plastic and Reconstructive Surgery® (MOC in FPRS®) program. As of January 2019, the total number of active ABFPRS diplomates was 1,353 and of these 333 diplomates have completed the MOC in FPRS requirements.	ABFPRS recertification has four components. To be eligible for recertification, diplomates must meet standards in each of these four areas: 1. Professional Standing: • Previous certification by the ABFPRS, American Board of Otolaryngology, American Board of Plastic Surgery or Royal College of Physicians and Surgeons of Canada in otolaryngology/head-and-neck surgery or plastic surgery • An unrestricted U.S. or Canadian medical license • Acceptable responses to a questionnaire regarding past or pending adverse actions • Satisfactory status with the Federation of State Medical Boards and the National Practitioners Data Bank • Documentation of privileges to practice facial plastic surgery in an accredited institution(s) or facility • Compliance with the ABFPRS Code of Ethics 2. CME: Complete 50 hours of CME during the 2 years preceding recertification 3. Cognitive Expertise: Pass proctored written and oral examinations 4. Practice Performance: Submit a 12-month sequential operative log of eligible procedures performed during the year preceding submission of an application, with a minimum of 50 procedures, and operative reports for the last 35 sequential cases on the operative log	
American Board of Cosmetic Surgery (ABCS) The ABCS (americanboardcosmeticsurgery.org), established in 1979, offers board certification exclusively in cosmetic surgery to qualifying surgeons. As of January 4, 2019, approximately 350 surgeons were certified by the ABCS. ABCS certification is valid for 10 years. All ABCS diplomates must be re-examined and complete all recertification requirements prior to completion of their 10th year of certification.	To be eligible for recertification, a surgeon must: • Hold at least one board certificate, recognized by the ABMS or the equivalent from the AOA, Royal College of Physicians and Surgeons of Canada, or American Board of Oral & Maxillofacial Surgery, in one of nine medical specialties related to cosmetic surgery • Maintain an unrestricted medical license • Complete 75 hours of CME during the immediate 3-years preceding recertification • Pass a comprehensive written exam • Demonstrate a high level of patient satisfaction based on surveys	

* The information in this table is sourced from the noted recertification program websites and is current as of January 15, 2019.

APPENDIX H

Recommended Changes to HOD Policies Related to Maintenance of Certification and Osteopathic Continuous Certification

H-275.924, ~~Maintenance of Certification~~ Continuing Board Certification

AMA Principles on ~~Maintenance of Certification~~ Continuing Board Certification (~~MOC~~CBC)

1. Changes in specialty-board certification requirements for ~~MOC~~CBC programs should be longitudinally stable in structure, although flexible in content.
2. Implementation of changes in ~~MOC~~CBC must be reasonable and take into consideration the time needed to develop the proper ~~MOC~~CBC structures as well as to educate physician diplomates about the requirements for participation.
3. Any changes to the ~~MOC~~CBC process for a given medical specialty board should occur no more frequently than the intervals used by that specialty board for MOC.
4. Any changes in the ~~MOC~~CBC process should not result in significantly increased cost or burden to physician participants (such as systems that mandate continuous documentation or require annual milestones).
5. ~~MOC~~CBC requirements should not reduce the capacity of the overall physician workforce. It is important to retain a structure of ~~MOC~~CBC programs that permits physicians to complete modules with temporal flexibility, compatible with their practice responsibilities.
6. Patient satisfaction programs such as The Consumer Assessment of Healthcare Providers and Systems (CAHPS) patient survey are neither appropriate nor effective survey tools to assess physician competence in many specialties.
7. Careful consideration should be given to the importance of retaining flexibility in pathways for ~~MOC~~CBC for physicians with careers that combine clinical patient care with significant leadership, administrative, research and teaching responsibilities.
8. Legal ramifications must be examined, and conflicts resolved, prior to data collection and/or displaying any information collected in the process of ~~MOC~~CBC. Specifically, careful consideration must be given to the types and format of physician-specific data to be publicly released in conjunction with ~~MOC~~CBC participation.
9. Our AMA affirms the current language regarding continuing medical education (CME): “Each Member Board will document that diplomates are meeting the CME and Self-Assessment requirements for ~~MOC~~CBC Part II. The content of CME and self-assessment programs receiving credit for ~~MOC~~CBC will be relevant to advances within the diplomate’s scope of practice, and free of commercial bias and direct support from pharmaceutical and device industries. Each diplomate will be required to complete CME credits (AMA PRA Category 1 Credit”, American Academy of Family Physicians Prescribed, American College of Obstetricians and Gynecologists, and/or American Osteopathic Association Category 1A).”
10. In relation to ~~MOC~~CBC Part II, our AMA continues to support and promote the AMA Physician’s Recognition Award (PRA) Credit system as one of the three major credit systems that comprise the foundation for continuing medical education in the U.S., including the Performance Improvement CME (PICME) format; and continues to develop relationships and agreements that may lead to standards accepted by all U.S. licensing boards, specialty boards, hospital credentialing bodies and other entities requiring evidence of physician CME.
11. ~~MOC~~CBC is but one component to promote patient safety and quality. Health care is a team effort, and changes to ~~MOC~~CBC should not create an unrealistic expectation that lapses in patient safety are primarily failures of individual physicians.

12. ~~MOC~~CBC should be based on evidence and designed to identify performance gaps and unmet needs, providing direction and guidance for improvement in physician performance and delivery of care.
13. The ~~MOC~~CBC process should be evaluated periodically to measure physician satisfaction, knowledge uptake and intent to maintain or change practice.
14. ~~MOC~~CBC should be used as a tool for continuous improvement.
15. The ~~MOC~~CBC program should not be a mandated requirement for licensure, credentialing, recredentialing, privileging, reimbursement, network participation, employment, or insurance panel participation.
16. Actively practicing physicians should be well-represented on specialty boards developing ~~MOC~~CBC.
17. Our AMA will include early career physicians when nominating individuals to the Boards of Directors for ABMS member boards.
18. ~~MOC~~CBC activities and measurement should be relevant to clinical practice.
19. The ~~MOC~~CBC process should be reflective of and consistent with the cost of development and administration of the ~~MOC~~CBC components, ensure a fair fee structure, and not present a barrier to patient care.
20. Any assessment should be used to guide physicians' self-directed study.
21. Specific content-based feedback after any assessment tests should be provided to physicians in a timely manner.
22. There should be multiple options for how an assessment could be structured to accommodate different learning styles.
23. Physicians with lifetime board certification should not be required to seek recertification.
24. No qualifiers or restrictions should be placed on diplomates with lifetime board certification recognized by the ABMS related to their participation in ~~MOC~~CBC.
25. Members of our House of Delegates are encouraged to increase their awareness of and participation in the proposed changes to physician self-regulation through their specialty organizations and other professional membership groups.
26. The initial certification status of time-limited diplomates shall be listed and publicly available on all American Board of Medical Specialties (ABMS) and ABMS Member Boards websites and physician certification databases. The names and initial certification status of time-limited diplomates shall not be removed from ABMS and ABMS Member Boards websites or physician certification databases even if the diplomate chooses not to participate in ~~MOC~~CBC.
27. Our AMA will continue to work with the national medical specialty societies to advocate for the physicians of America to receive value in the services they purchase for ~~Maintenance of Certification~~Continuing Board Certification from their specialty boards. Value in ~~MOC~~CBC should include cost effectiveness with full financial transparency, respect for physicians time and their patient care commitments, alignment of ~~MOC~~CBC requirements with other regulator and payer requirements, and adherence to an evidence basis for both ~~MOC~~CBC content and processes.
(CME Rep. 16, A-09 Reaffirmed: CME Rep. 11, A-12 Reaffirmed: CME Rep. 10, A-12 Reaffirmed in lieu of Res. 313, A-12 Reaffirmed: CME Rep. 4, A-13 Reaffirmed in lieu of Res. 919, I-13 Appended: Sub. Res. 920, I-14 Reaffirmed: CME Rep. 2, A-15 Appended: Res. 314, A-15 Modified: CME Rep. 2, I-15 Reaffirmation A-16 Reaffirmed: Res. 309, A-16 Modified: Res. 307, I-16 Reaffirmed: BOT Rep. 05, I-16 Appended: Res. 319, A-17 Reaffirmed in lieu of: Res. 322, A-17 Modified: Res. 953, I-17)"

D-275.954, ~~Maintenance of Certification and Osteopathic Continuous Certification~~ Continuing Board Certification
Our AMA will:
1. Continue to monitor the evolution of ~~Maintenance of Certification (MOC) and Osteopathic Continuous Certification (OCC)~~Continuing Board Certification (CBC), continue its active engagement in discussions regarding their implementation, encourage specialty boards to investigate and/or establish alternative approaches for ~~MOC~~CBC, and prepare a yearly report to the House of Delegates regarding the ~~MOC and OCC~~CBC process.
2. Continue to review, through its Council on Medical Education, published literature and emerging data as part of the Council's ongoing efforts to critically review ~~MOC and OCC~~CBC issues.
3. Continue to monitor the progress by the American Board of Medical Specialties (ABMS) and its member boards on implementation of ~~MOC~~CBC, and encourage the ABMS to report its research findings on the issues surrounding certification and ~~MOC~~CBC on a periodic basis.
4. Encourage the ABMS and its member boards to continue to explore other ways to measure the ability of physicians to access and apply knowledge to care for patients, and to continue to examine the evidence supporting the value of specialty board certification and ~~MOC~~CBC.
5. Work with the ABMS to streamline and improve the Cognitive Expertise (Part III) component of ~~MOC~~CBC, including the exploration of alternative formats, in ways that effectively evaluate acquisition of new knowledge while reducing or eliminating the burden of a high-stakes examination.
6. Work with interested parties to ensure that ~~MOC~~CBC uses more than one pathway to assess accurately the competence of practicing physicians, to monitor for exam relevance and to ensure that ~~MOC~~CBC does not lead to unintended economic hardship such as hospital de-credentialing of practicing physicians.
7. Recommend that the ABMS not introduce additional assessment modalities that have not been validated to show improvement in physician performance and/or patient safety.
8. Work with the ABMS to eliminate practice performance assessment modules, as currently written, from ~~MOC~~CBC requirements.
9. Encourage the ABMS to ensure that all ABMS member boards provide full transparency related to the costs of preparing, administering, scoring and reporting ~~MOC~~CBC and certifying examinations.
10. Encourage the ABMS to ensure that ~~MOC~~CBC and certifying examinations do not result in substantial financial gain to ABMS member boards, and advocate that the ABMS develop fiduciary standards for its member boards that are consistent with this principle.
11. Work with the ABMS to lessen the burden of ~~MOC~~CBC on physicians with multiple board certifications, particularly to ensure that ~~MOC~~CBC is specifically relevant to the physician's current practice.
12. Work with key stakeholders to (a) support ongoing ABMS member board efforts to allow multiple and diverse physician educational and quality improvement activities to qualify for ~~MOC~~CBC; (b) support ABMS member board activities in facilitating the use of ~~MOC~~CBC quality improvement activities to count for other accountability requirements or programs, such as pay for quality/performance or PQRS reimbursement; (c) encourage ABMS member boards to enhance the consistency of quality improvement programs across all boards; and (d) work with specialty societies and ABMS member boards to develop tools and services that help physicians meet ~~MOC~~CBC requirements.
13. Work with the ABMS and its member boards to collect data on why physicians choose to maintain or discontinue their board certification.
14. Work with the ABMS to study whether ~~MOC~~CBC is an important factor in a physician's decision to retire and to determine its impact on the US physician workforce.

15. Encourage the ABMS to use data from ~~MOC~~CBC to track whether physicians are maintaining certification and share this data with the AMA.
16. Encourage AMA members to be proactive in shaping ~~MOC and OCC~~CBC by seeking leadership positions on the ABMS member boards, American Osteopathic Association (AOA) specialty certifying boards, and ~~MOC~~CBC Committees.
17. Continue to monitor the actions of professional societies regarding recommendations for modification of ~~MOC~~CBC.
18. Encourage medical specialty societies' leadership to work with the ABMS, and its member boards, to identify those specialty organizations that have developed an appropriate and relevant ~~MOC~~CBC process for its members.
19. Continue to work with the ABMS to ensure that physicians are clearly informed of the ~~MOC~~CBC requirements for their specific board and the timelines for accomplishing those requirements.
20. Encourage the ABMS and its member boards to develop a system to actively alert physicians of the due dates of the multi-stage requirements of continuous professional development and performance in practice, thereby assisting them with maintaining their board certification.
21. Recommend to the ABMS that all physician members of those boards governing the ~~MOC~~CBC process be required to participate in ~~MOC~~CBC.
22. Continue to participate in the National Alliance for Physician Competence forums.
23. Encourage the PCPI Foundation, the ABMS, and the Council of Medical Specialty Societies to work together toward utilizing Consortium performance measures in Part IV of ~~MOC~~CBC.
24. Continue to assist physicians in practice performance improvement.
25. Encourage all specialty societies to grant certified CME credit for activities that they offer to fulfill requirements of their respective specialty board's ~~MOC~~CBC and associated processes.
26. Support the American College of Physicians as well as other professional societies in their efforts to work with the American Board of Internal Medicine (ABIM) to improve the ~~MOC~~CBC program.
27. Oppose those maintenance of certification programs administered by the specialty boards of the ABMS, or of any other similar physician certifying organization, which do not appropriately adhere to the principles codified as AMA Policy on ~~Maintenance of Certification~~ Continuing Board Certification.
28. Ask the ABMS to encourage its member boards to review their maintenance of certification policies regarding the requirements for maintaining underlying primary or initial specialty board certification in addition to subspecialty board certification, if they have not yet done so, to allow physicians the option to focus on ~~maintenance of certification~~ continuing board certification activities relevant to their practice.
29. Call for the immediate end of any mandatory, secured recertifying examination by the ABMS or other certifying organizations as part of the recertification process for all those specialties that still require a secure, high-stakes recertification examination.
30. Support a recertification process based on high quality, appropriate Continuing Medical Education (CME) material directed by the AMA recognized specialty societies covering the physician's practice area, in cooperation with other willing stakeholders, that would be completed on a regular basis as determined by the individual medical specialty, to ensure lifelong learning.
31. Continue to work with the ABMS to encourage the development by and the sharing between specialty boards of alternative ways to assess medical knowledge other than by a secure high stakes exam.
32. Continue to support the requirement of CME and ongoing, quality assessments of physicians, where such CME is proven to be cost-effective and shown by evidence to improve quality of care for patients.
33. Through legislative, regulatory, or collaborative efforts, will work with interested state medical societies and other interested parties by creating model state legislation and model medical staff

bylaws while advocating that ~~Maintenance of Certification~~ Continuing Board Certification not be a requirement for: (a) medical staff membership, privileging, credentialing, or recredentialing; (b) insurance panel participation; or (c) state medical licensure.
34. Increase its efforts to work with the insurance industry to ensure that ~~maintenance of certification~~ continuing board certification does not become a requirement for insurance panel participation.
35. Advocate that physicians who participate in programs related to quality improvement and/or patient safety receive credit for ~~MOC~~CBC Part IV.
36. Continue to work with the medical societies and the American Board of Medical Specialties (ABMS) member boards that have not yet moved to a process to improve the Part III secure, high-stakes examination to encourage them to do so.
37. Through its Council on Medical Education, continue to be actively engaged in following the work of the ABMS Continuing Board Certification: Vision for the Future Commission.
38. (a) Submit commentary to the American Board of Medical Specialties (ABMS) Continuing Board Certification: Vision for the Future initiative, asking that junior diplomates be given equal opportunity to serve on ABMS and its member boards; and (b) work with the ABMS and member boards to encourage the inclusion of younger physicians on the ABMS and its member boards.
39. Continue studying the certifying bodies that compete with the American Board of Medical Specialties and provide an update in the Council on Medical Education s annual report on maintenance of certification at the 2019 Annual Meeting.
(CME Rep. 2, I-15 Appended: Res. 911, I-15 Appended: Res. 309, A-16 Appended: CME Rep. 02, A-16 Appended: Res. 307, I-16 Appended: Res. 310, I-16 Modified: CME Rep. 02, A-17 Reaffirmed: Res. 316, A-17 Reaffirmed in lieu of: Res. 322, A-17 Appended: CME Rep. 02, A-18 Appended: Res. 320, A-18 Appended: Res. 957, I-18)

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REPORT OF THE COUNCIL ON MEDICAL EDUCATION

CME Report 3-A-19

Subject:	Standardizing the Residency Match System and Timeline (CME Report 6-A-17)
Presented by:	Carol Berkowitz, MD, Chair
Referred to:	Reference Committee C (Nicole Riddle, MD, Chair)

INTRODUCTION

Council on Medical Education Report 6-A-17 recommended, in part, that our American Medical Association (AMA):

- Encourage the Association of University Professors of Ophthalmology, the American Urological Association and other appropriate stakeholders to move ophthalmology and urology, which have early matches, into the National Resident Matching Program (NRMP); and

- Encourage the NRMP to create a sequential match process for those specialties that require a preliminary year of training, thus allowing a match to a PGY-2 position to be followed later by a second match to a PGY-1 position, which would reduce applicants' expenses for applications and travel.

At the 2017 Annual Meeting, testimony before Reference Committee C and the House of Delegates reflected almost evenly mixed testimony on this report. Representatives of the affected disciplines (ophthalmology and urology) argued that the current match system works well, provides savings in travel costs, and minimizes inconvenience. In addition, those who are unsuccessful in the ophthalmology or urology match can pursue a position in the NRMP match. It was also noted that it is impossible to guarantee that the complex match algorithm run by the NRMP could accommodate a sequential match. Others argued in favor of the report's adoption, to level the playing field for all medical students; simplify couples' matching (particularly for couples who are in separate matches); and heighten the opportunity for students to be exposed (during their fourth-year rotations) to fields that might be rewarding choices. The HOD referred recommendations 2 and 3, which are shown above; recommendation 1 was adopted (D-310.977 [16], "National Resident Matching Program Reform").

This report by the Council on Medical Education includes: 1) a brief summary of CME Report 6-A-17; 2) a description of recent changes in matching status for urology and ophthalmology specialties; 3) an accounting of the number of specialties and programs that currently require applicants to simultaneously match into a preliminary year of training and a second year of training that could participate in a sequential match; and 4) the results of discussions with the NRMP regarding a sequential match.

BACKGROUND

The specialties of ophthalmology and urology have had their own match programs for many years, primarily because both specialties require a preliminary year of training. Typically, for ophthalmology, residents spend that first postgraduate year, or PGY-1, in a transitional or internal medicine program; for urology, the PGY-1 year is spent in general surgery. The matches for ophthalmology and urology occur in January (earlier in the academic year than for specialties that secure matches through the NRMP), which allows applicants successfully matched into ophthalmology or urology PGY-2 positions to then attempt to match into PGY-1 positions in the NRMP. For some applicants, this system can be advantageous.

For example, successful applicants to early match programs will have resolved some or all of the guesswork involved in finding a PGY-1 position. Receiving interview offers for a PGY-2 position in a particular geographic area can help in application and interview strategies for a PGY-1 position, and once the match has occurred, the applicant can submit a tailored rank order list for the PGY-1 position. Potentially unsuccessful candidates who do not receive interview offers from early match programs will still have time to apply to programs in other specialties.

The limitations of the early match process, however, include additional planning, a drawn-out application and interview season, and substantial financial costs for the applicant (especially for ophthalmology applicants), without the advantages available through the NRMP. Since 1988 the NRMP has had the capability to match applicants simultaneously into PGY-1 and PGY-2 positions, by creating a supplemental rank order list. This process is used by many applicants to programs that have advanced positions, such as radiology, which requires a preliminary PGY-1 position. Furthermore, the NRMP allows two applicants to link their rank order lists in such a way as to maximize their opportunity to match into programs in the same geographic area—the so-called "couples match." Neither of these more sophisticated matching processes is available in the early match programs. Finally, the NRMP offers far more detailed match analyses and statistics, which can assist applicants and their advisors in crafting match strategy.

The two specialties that hold early matches are the primary beneficiaries of the current system. Ophthalmology and urology are able to control their own matches and peruse, interview, and claim future residents before other specialties. In addition, applicant match fees generate funds through which the specialties can create educational resources.

Council on Medical Education Report 6-A-17 concluded that if the NRMP were able to hold a sequential match, the advantages to applicants of participating in two matches, i.e., being able to reduce the number of applications sent and limit travel for interviews for a preliminary year position, could be extended to applicants in such specialties that require a preliminary year.

CHANGES IN TRAINING LENGTH AND REQUIREMENTS

Both ophthalmology and urology specialties have proposed revisions to the length of training required in their respective specialties, which would affect the necessity for two separate matches.

Ophthalmology

Currently, Accreditation Council for Graduate Medical Education (ACGME) program requirements for ophthalmology state that the length of the training program must be 36 months, and that prior to appointment to a program, residents must have completed a postgraduate clinical year in an ACGME-accredited program (or a program located and accredited in Canada) in

emergency medicine, family medicine, internal medicine, neurology, obstetrics and gynecology, pediatrics, surgery, or transitional year. This has been the established length and sequence of ophthalmology training for many years.

In 2013, the American Academy of Ophthalmology and the Association of University Professors of Ophthalmology (AUPO) identified a need to restructure the PGY-1 year.[1] In August 2018, the ACGME review committee for ophthalmology proposed revisions to the program requirements, which were accepted by the ACGME Board of Directors in February 2019. The revisions to ophthalmology program requirements regarding the PGY-1 year go into effect July 2021.[2]

Education in ophthalmology will then become 48 months in length, in one of two formats: an integrated format in which all 48 months are under the authority and direction of the ophthalmology program director, or in a joint/preliminary format, in which a preliminary year precedes 36 months of education in an ophthalmology program. In the latter case, the preliminary year will take place in the same institution that sponsors the ophthalmology program, and the ophthalmology program director will have input into the PGY-1 education. Regardless of format, all residents must have three months of ophthalmology education during the PGY-1 year.[2]

Recognizing that these revisions may require significant changes for existing programs, the ACGME will not administer citations to programs for not having an integrated or joint/preliminary program and related PGY-1 requirements until after July 2023; furthermore, programs that are unable to establish either format may request an exception from the Review Committee.[3]

Once these requirements are in place, the need for applicants to use the NRMP to match into PGY-1 positions after they have matched into an ophthalmology program using the San Francisco Match (SF Match, the matching service used by ophthalmology programs, owned by the AUPO) may be reduced, at least for those applicants matching into integrated programs. While the review committee notes that a “number” of programs are currently in the joint/preliminary format, an exact count is not known. Given the coordination and negotiation that ophthalmology programs will have to undertake with other training programs (such as transitional year programs) to ensure that there will be PGY-1 positions at the sponsoring institution with three months of ophthalmology experience, it may be some time before all programs are fully compliant with these requirements. If all programs were to become fully integrated, the need for a separate match that takes place before or outside of the NRMP’s Main Residency Match would seem to be obviated. As an example, the specialties of otolaryngology and neurosurgery previously participated in the San Francisco Match, but joined the NRMP once the decision was made to fully integrate the PGY-1 year. However, ophthalmology’s history with the SF Match, and the revenue it generates for the AUPO, may lead the organization to continue to operate the match separately.

Urology

In October 2017, the ACGME review committee for urology proposed, as part of the decennial major revision for urology training, to change the accredited training length from 48 months to 60 months by encompassing the PGY-1 year. These revisions were accepted by the ACGME Board in June 2018 and go into effect in July 2019.[4] Previously, residents who entered urology in the PGY-2 year spent the PGY-1 year in a general surgery program. When the revisions take effect, residents will no longer need to use the NRMP to match into the general surgery year. Senior medical students will use the Electronic Residency Application Service (ERAS) to apply to urology programs only (no longer applying to surgical programs as well) and will continue to use the match service run by the American Urological Association (AUA) to match directly into a urology program. Given the urology profession’s satisfaction in controlling the match, as well the perceived

benefits of holding the match earlier in the year than the NRMP match, it is unlikely that urology will join the NRMP at this time.[5]

SPECIALTIES WITH TWO MATCHES

In the NRMP's 2018 Main Residency Match, there were 11 specialties with PGY-2 (advanced) positions, as shown in the table below.[6]

Specialty	No. of programs	No. of positions
Anesthesiology	75	447
Child neurology	7	8
Dermatology	122	426
Interventional radiology (integrated)	51	98
Neurodevelopmental disabilities	3	4
Neurology	55	287
Nuclear medicine	2	3
Physical medicine & rehabilitation	61	281
Radiation oncology	85	177
Radiology-diagnostic	171	944
Radiology-nuclear medicine	3	3
Total	*635*	*2,678*

Of the 4,780 applicants ranking at least one PGY-2 position combined with a PGY-1 position, 2,244 individuals matched to both. Many of the 4,780 applicants also ranked categorical positions as well; most of the 2,536 who did not match into both a PGY-1 and PGY-2 position were successfully matched to another position.[7]

The proportion of programs with advanced positions and the proportion of advanced positions offered have decreased over time. In the 2008 Main Residency Match, 14.5 percent of all participating programs offered PGY-2 positions, and PGY-2 positions made up 11.3 percent of all positions offered.[8] In 2018, those percentages had declined to 11.9 percent and 8.1 percent, respectively.[6]

DISCUSSIONS WITH THE NRMP

The NRMP has previously considered a two-phased Main Residency Match for the purpose of eliminating the "Scramble" that occurred during Match Week. Although applicants, medical schools, and residency program directors liked the idea of a two-phased Match, they did not like the schedule. Medical schools did not want the Match to occur earlier than March because it would further erode the fourth-year curriculum, and program directors did not want a final Match Day to occur later than the month of March because of difficulties on-boarding new residents. A second Match designed to fill preliminary positions would be difficult to implement not just because of scheduling, but also because the significant cost could not be justified for a relatively small number of positions. The majority of applicants are able to match simultaneously to PGY-1 and PGY-2 positions. Applicants ranking PGY-2 positions in advanced programs can create and attach a supplemental rank order list of preliminary programs to each advanced program. Also, many programs with advanced positions have agreements with programs with preliminary positions at the same institution to coordinate interviewing applicants at the same time and to create joint advanced/preliminary arrangements so that applicants can match simultaneously into a full course of training.[9]

The NRMP also has fielded questions regarding Match flexibility and scheduling for applicants who have graduated from medical school "off-cycle," a potential result of participating in a competency-based medical school educational program. The NRMP's All In Policy states that a residency program that registers for the Main Residency Match must attempt to fill all of its positions through the Match. Offering a position outside the Match makes the program ineligible for the Match, unless the program has been granted an exception. To date, the NRMP Board of Directors has not granted an exception for competency-based curricula, although it is reviewing an exception request submitted by the Education in Pediatrics Across the Continuum (EPAC) Project. It is important to note, however, that if a program has a position that becomes available after September, and training can begin before February 1, that position can be filled off-cycle without jeopardizing the program's adherence to the All In Policy.

CURRENT AMA POLICY

AMA policies related to this topic are listed in the Appendix.

SUMMARY AND RECOMMENDATIONS

Recently proposed revisions to the program requirements for ophthalmology and urology have changed the dynamics of the early match. The concerns expressed by those applicants who needed to participate in two separate matches for a urology position have been alleviated, as the match run by the AUA will now include PGY-1 positions. Those who do not successfully match into a urology program will still have the opportunity to apply to, interview for, and rank a program in the NRMP. A somewhat similar situation exists for students applying to ophthalmology programs. Even though the new integrated and joint/preliminary format changes more closely incorporate the PGY-1 year, the specialty's desire to control the match process suggests that, at least in the near future, there will continue to be two matches. However, applicants entering the ophthalmology and urology matches do not have the opportunity to fully participate in the NRMP "couples match," nor do they benefit from insight provided by the sophisticated data analysis and reports prepared by the NRMP. Additionally, preservation of this two-step match process may reduce applicants' exposure (during their fourth-year rotations) to fields that they might have otherwise enjoyed as a result of the earlier commitment to registering for the ophthalmology or urology match.

While the NRMP has investigated the possibility of a sequential match, which could reduce application and interview costs for students applying to programs with advanced positions, at this time it has concluded that the amount of coordination, cooperation, and costs involved were not justified given the relatively small number of students affected. However, the NRMP is exploring if it is possible to provide exceptions to programs that wish to accept students who graduate from competency-based medical education programs at off-cycle times.

The Council on Medical Education therefore recommends that the following recommendations be adopted and that the remainder of the report be filed:

1. That our AMA encourage appropriate stakeholders to explore options to decrease the burden upon medical students who must apply to separate preliminary PGY-1 and categorical PGY-2 positions. (Directive to Take Action)

2. That our AMA work with the Accreditation Council for Graduate Medical Education to encourage programs with PGY-2 positions in the National Resident Matching Program (NRMP) to create local PGY-1 positions that will enable coordinated applications and interviews for medical students. (Directive to Take Action)

3. That our AMA encourage the NRMP to design a process that will allow competency-based student graduation and off-cycle entry into residency programs. (Directive to Take Action)

4. That our AMA encourage the NRMP, the San Francisco Match, the American Urological Association, the Electronic Residency Application Service, and other stakeholders to reduce barriers for medical students, residents, and physicians applying to match into training programs, and to ensure that all applicants have access to robust, informative statistics to assist in decision-making. (Directive to Take Action)

Fiscal note: $1,000.

APPENDIX: RELEVANT AMA POLICY

D-310.977, "National Resident Matching Program Reform"

Our AMA … (7) will work with the NRMP, and other residency match programs, in revising Match policy, including the secondary match or scramble process to create more standardized rules for all candidates including supplication timelines and requirements; (8) will work with the NRMP and other external bodies to develop mechanisms that limit disparities within the residency application process and allow both flexibility and standard rules for applicant; … (16) supports the movement toward a unified and standardized residency application and match system for all non-military residencies.

H-310.910, "Preliminary Year Program Placement"

Our AMA encourages the Accreditation Council for Graduate Medical Education, the American Osteopathic Association, and other involved organizations to strongly encourage residency programs that now require a preliminary year to match residents for their specialty and then arrange with another department or another medical center for the preliminary year of training unless the applicant chooses to pursue preliminary year training separately.

D-310.958, "Fellowship Application Reform"

Our AMA will (1.a) continue to collaborate with the Council of Medical Specialty Societies and other appropriate organizations toward the goal of establishing standardized application and selection processes for specialty and subspecialty fellowship training.

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REPORT 4 OF THE COUNCIL ON MEDICAL EDUCATION (A-19)
Augmented Intelligence in Medical Education (Resolution 317-A-18)
(Reference Committee C)

EXECUTIVE SUMMARY

At the 2018 Annual Meeting of the American Medical Association (AMA), delegates adopted Policy H-480.940, "Augmented Intelligence in Health Care," which established the AMA's first official policy with respect to augmented intelligence (AI). Among other recommendations, the report called on the AMA to "encourage education for patients, physicians, medical students, other health care professionals, and health administrators to promote greater understanding of the promise and limitations of health care AI."

Also during the 2018 Annual Meeting, Resolution 317-A-18, "Emerging Technologies (Robotics and AI) in Medical School Education," was referred. This resolution called on the AMA to (1) encourage medical schools to evaluate and update as appropriate their curriculum to increase students' exposure to emerging technologies, in particular those related to robotics and artificial intelligence; 2) encourage medical schools to provide student access to computational resources like cloud computing services; 3) reaffirm Policy H-480.988, which urges physicians to continue to ensure that, for every patient, technologies will be utilized in the safest and most effective manner by health care professionals; and 4) reaffirm Opinion 1.2.11 of the AMA Code of Medical Ethics and Policy H-480.996, which state the guidelines for the ethical development of medical technology and innovation in health care.

This report summarizes existing AMA policy related to AI; provides definitions of related terms; reviews current efforts related to AI in medical education; and provides recommendations for consideration by the AMA House of Delegates.

REPORT OF THE COUNCIL ON MEDICAL EDUCATION

CME Report 4-A-19

Subject: Augmented Intelligence in Medical Education (Resolution 317-A-18)

Presented by: Carol Berkowitz, MD, Chair

Referred to: Reference Committee C
(Nicole Riddle, MD, Chair)

INTRODUCTION

At the 2018 Annual Meeting of the American Medical Association (AMA), the AMA House of Delegates (HOD) adopted Policy H-480.940, "Augmented Intelligence in Health Care," which established the AMA's first official policy with respect to augmented intelligence (AI). Among other recommendations, the report called on the AMA to "encourage education for patients, physicians, medical students, other health care professionals, and health administrators to promote greater understanding of the promise and limitations of health care AI."[1]

Also during the 2018 Annual Meeting, Resolution 317-A-18, "Emerging Technologies (Robotics and AI) in Medical School Education," introduced by the Maryland Delegation, was referred for further study. This resolution called on the AMA to (1) encourage medical schools to evaluate and update as appropriate their curriculum to increase students' exposure to emerging technologies, in particular those related to robotics and artificial intelligence; 2) encourage medical schools to provide student access to computational resources like cloud computing services; 3) reaffirm Policy H-480.988, which urges physicians to continue to ensure that, for every patient, technologies will be utilized in the safest and most effective manner by health care professionals; and 4) reaffirm Opinion 1.2.11 of the AMA Code of Ethics and Policy H-480.996, which state the guidelines for the ethical development of medical technology and innovation in health care. Testimony on this item in Reference Committee C was mostly supportive, and noted that medical students will need access to new types of technology to be better prepared for practice. The need for continued ethical guidance in this area also was referenced. Testimony in opposition argued that the appropriate place for instruction in these new technologies should be at the graduate medical education (GME), rather than undergraduate medical education (UME) level, as many of these solutions are specialty specific. In light of the Council on Medical Education's planned report to the HOD regarding AI across the medical education continuum at the 2019 Annual Meeting, Resolution 317-A-18 was referred for inclusion in this report.

DEFINITION OF ARTIFICIAL AND AUGMENTED INTELLIGENCE

The AMA's Council on Long Range Planning and Development (CLRPD) defines artificial intelligence as "the ability of a computer to complete tasks in a manner typically associated with a rational human being—a quality that enables an entity to function appropriately and with foresight in its environment. True [artificial intelligence] is widely regarded as a program or algorithm that can beat the Turing Test, which states that an artificial intelligence must be able to exhibit intelligent behavior that is indistinguishable from that of a human."[2] Augmented intelligence,

meanwhile, is "an alternative conceptualization that focuses on [artificial intelligence's] assistive role, emphasizing the fact that its design enhances human intelligence rather than replaces it."[2]

In its report that led to Policy H-480.940, the Board of Trustees further parsed these two related, but distinct, terms: "Artificial intelligence constitutes a host of computational methods that produce systems that perform tasks normally requiring human intelligence. These computational methods include, but are not limited to, machine image recognition, natural language processing, and machine learning. However, in health care a more appropriate term is 'augmented intelligence,' reflecting the enhanced capabilities of human clinical decision making when coupled with these computational methods and systems."[1]

Examples of AI methods used in medicine include, but are not limited to, machine learning, deep learning, neural networks, and natural language processing. Applications include, but are not limited to, clinical decision support tools, diagnostic support tools, virtual reality, augmented reality, simulation, gamification, and wearables that contribute data to physician decision-making. These technologies can be understood to comprise areas of cognition (such as algorithms), workflow (guidance regarding prioritization), quality (validation of algorithms), and monitoring (peer review for machine learning).

THE NEED FOR POLICY RELATED TO ARTIFICIAL AND AUGMENTED INTELLIGENCE

Almost a decade ago, Peter Densen wrote:

> It is estimated that the doubling time of medical knowledge in 1950 was 50 years; in 1980, 7 years; and in 2010, 3.5 years. In 2020 it is projected to be 0.2 years—just 73 days. Students who began medical school in the autumn of 2010 will experience approximately three doublings in knowledge by the time they complete the minimum length of training (7 years) needed to practice medicine. Students who graduate in 2020 will experience four doublings in knowledge. What was learned in the first 3 years of medical school will be just 6% of what is known at the end of the decade from 2010 to 2020. Knowledge is expanding faster than our ability to assimilate and apply it effectively; and this is as true in education and patient care as it is in research. Clearly, simply adding more material and or time to the curriculum will not be an effective coping strategy—fundamental change has become an imperative.[3]

Since Densen published his predictions, the pace of change in medical education has continued to be a topic of focus and discussion and can be framed as a disruption to traditional instructional methods and timelines. The AMA has long demonstrated a commitment to developing and supporting disruptive advancements in medical education, both autonomously and in partnership with others. This commitment can be seen in the Council on Medical Education's contributions to the 1910 Flexner Report, the establishment of many of the leading U.S. medical education organizations that exist today, the groundbreaking Accelerating Change in Medical Education Consortium, the newly launched Reimagining Residency initiative, and enhanced e-learning content design and delivery. It is therefore appropriate that the AMA now begin work on a body of policy and thoughtful guidance related to AI in medical education, especially as Policy H-480.940, Resolution 317-A-18, and the CLRPD's Primer on Artificial and Augmented Intelligence have clearly demonstrated the urgent need for policy in this area.

DISCUSSION

As with many previously introduced technologies, the potential benefits, risks, and unknowns of incorporating AI into medical education have yet to be fully revealed. The promise of AI in medical education includes the potential for enhanced learning, ultimately resulting in benefit to patients; efficiency gains achieved via a reallocation of physician time; further development of physicians' emotional intelligence skills due to a reduced need to focus on automatable tasks; and enhanced learner evaluations, including the ability to assess competencies prospectively, accurately, and continuously, leading to greater facilitation of independent learning and an elimination of the "stop and test" mindset. Just-in-time assessments and learning interventions may assist with progression through competencies. In the context of the AMA's current focus on health systems science, AI promises to enable more encompassing systems analyses and quality improvement approaches and to introduce computational modeling that may replace cycles of iterative improvements. Additionally, AI in medicine may aid instruction in and delivery of care to rural or otherwise underserved locations.

Concerns, however, also exist, such as the possibility of physician de-skilling as more cognitive tasks are performed by AI; an unintentional reinforcement of health disparities,[4] both in terms of patient health outcomes and for clinicians practicing in less resourced clinical environments; the potential loss of physician humanism and further deterioration of physicians' bedside skills; and the risk of overutilization of AI-delivered care, such as the use of technology for the sake of using technology and the risk of adding to, rather than replacing items in, the curriculum.

Unknowns range from implications for learner wellness to concerns regarding exposure of gaps in faculty knowledge. Incorporation of AI in medical education may streamline learning and clinical workflow, gifting additional time to learners that can be used to focus on patients and self; however, it also has the potential to do the opposite, disrupting and displacing traditional instructional techniques without clear benefits to learners or patients. Other unknowns include the effects of AI on the teaching/modeling of professional judgment; medicolegal and ethical concerns; and rapidly changing regulatory modernization models.

The exposure of gaps in faculty knowledge of AI is already being documented; these gaps may be inhibiting learners who have an active interest in AI applications but lack exposure to knowledgeable faculty to help them understand, access, and apply them. For example, a 2015 publication[5] noted that 30 percent of U.S. medical student survey respondents had interest in clinical informatics, but were not able to identify training opportunities to assist in meeting this desire to learn. These knowledge gaps, however, should not be solely characterized in a negative fashion, as they also present important opportunities for professional development and pave the way for the introduction of new types of instructors into the medical education environment. Gonzalo et al.[6] acknowledge these points, noting the importance of focusing not only on expanding the knowledge base/skill set of current educators, but also of employing a new cohort of educators with skills in new areas. The Council on Medical Education agrees with this characterization and believes that institutional leaders and academic deans must proactively accelerate their inclusion of nonclinicians, such as data scientists and engineers, onto their faculty rosters.

Investments in AI

Private funding of AI technologies has exploded in recent years. One source estimates that the AI health market will grow to $6.6 billion by 2021 and exceed $10 billion by 2024.[7] Another estimate places AI-driven GDP growth at $15.7 trillion by 2030.[8]

The U.S. House of Representatives' Committee on Oversight and Reform, Subcommittee on Information Technology, has specifically noted that one of the benefits of increased U.S. funding for AI research and development would be the ability to fund more graduate students, which in turn would expand the future U.S. AI workforce. On February 11, 2019, President Donald J. Trump issued an Executive Order on Maintaining American Leadership in Artificial Intelligence, which, acknowledges that "[c]ontinued American leadership in AI is of paramount importance to maintaining the economic and national security of the United States and to shaping the global evolution of AI in a manner consistent with our Nation's values, policies, and priorities," and notes that the United States "must train current and future generations of American workers with the skills to develop and apply AI technologies to prepare them for today's economy and jobs of the future." This training will be achieved through "apprenticeships; skills programs; and education in science, technology, engineering, and mathematics (STEM), with an emphasis on computer science, to ensure that American workers, including Federal workers, are capable of taking full advantage of the opportunities of AI."[9]

Additionally, the Centers for Medicare & Medicaid Services has recently committed to investment in this area and has launched an Artificial Intelligence Health Outcomes Challenge,[10] with the goal of "exploring how to harness AI to predict health outcomes that are important to patients and clinicians, and to enhance care delivery."

AI and Education

At the practical level, it is important to distinguish between AI as a topic of study itself and in the instruction of learners regarding use of existing tools and applications. Furthermore, it is important to acknowledge that educating students and physicians in the practical use of specific AI technologies is not necessarily equivalent to educating students and physicians to understand how the technology works or how to evaluate its applicability, appropriateness, and effectiveness with respect to patient care.

An additional consideration will be the need for learners and physicians to adjust their receptivity to machine-recommended learning or clinical actions. The need for this receptivity may in turn spark a discussion regarding the kind of student who should be recruited to enter the profession. Traditionally, while multiple domains of ability have been valued, a premium has been placed on individual mastery of knowledge. Learners who excel at this type of knowledge, however, may not be the same kind of learners who interact effectively with AI systems. Even if learners are receptive to this type of practice, a rise in learning and practice that is less supervised by human instructors and colleagues and more interactive with non-human technologies may negatively impact patient care if recruits to the profession are not able to maintain patient communication and develop critical evaluation skills.

Recent scholarly work has documented this shift in thinking with respect to the goals of medical education.[11] Newer thinking acknowledges the rapid pace of change and emphasizes the need for physicians to analyze, categorize, contextualize, seek, find, and evaluate data and place these data in clinical context, and highlights the position that critical reasoning skills are imperative. Wartman and Combs argue that the physician of the future will require a shift in professional identity, which must be embraced early on in medical education.[11] Furthermore, the dawn of precision medicine introduces treatment possibilities that require physicians flexible enough to think beyond established treatment protocols.[11] These changes require parallel changes in the way medical students, residents, fellows, instructors, and practicing physicians are taught and, in turn, teach.

ACCREDITATION AND LICENSURE IMPLICATIONS

Profound changes to established medical educational content, as well as to methods of instruction, necessitate considered and reflective responses from those organizations that focus on accreditation and licensure. Yet the response in this area regarding the implications of AI in medical education has been varied.

The Liaison Committee on Medical Education (LCME) does not specifically address AI, but several of its standards relate to these concepts:

- Standard 4.1, Sufficiency of Faculty, requires that "A medical school has in place a sufficient cohort of faculty members with the qualifications and time required to deliver the medical curriculum and to meet the other needs and fulfill the other missions of the institution."
- Standard 4.5, Faculty Professional Development, notes, "A medical school and/or its sponsoring institution provides opportunities for professional development to each faculty member in the areas of discipline content, curricular design, program evaluation, student assessment methods, instructional methodology, and research to enhance his or her skills and leadership abilities in these areas."
- Standard 5.4, Sufficiency of Buildings and Equipment, states that "A medical school has, or is assured the use of, buildings and equipment sufficient to achieve its educational, clinical, and research missions."
- Standard 5.6, Clinical Instructional Facilities/Information Resources, requires that "Each hospital or other clinical facility affiliated with a medical school that serves as a major location for required clinical learning experiences has sufficient information resources and instructional facilities for medical student education."
- Standard 5.9, Information Technology Resources/Staff, states that "A medical school must provide access to well-maintained information technology resources sufficient in scope to support its educational and other missions." Further, information technology staff must have "sufficient expertise to fulfill its responsibilities and is responsive to the needs of the medical students, faculty members, and others associated with the institution."
- Standard 6.3, Self-Directed and Life-Long Learning, requires that "The faculty of a medical school ensure that the medical curriculum includes self-directed learning experiences and time for independent study to allow medical students to develop the skills of lifelong learning. Self-directed learning involves medical students' self-assessment of learning needs; independent identification, analysis, and synthesis of relevant information; and appraisal of the credibility of information sources."

Commission on Osteopathic College Accreditation (COCA) standards are similar:

- Standard 4, Facilities, states that "A COM [college of osteopathic medicine] must have sufficient physical facilities, equipment, and resources for clinical, instructional, research, and technological functions of the COM. These resources must be readily available and accessible across all COM locations to meet its needs, the needs of the students consistent with the approved class size, and to achieve its mission."
- Element 4.3, Information Technology, states that "A COM must ensure access to information technology to support its mission."
- Element 4.4, Learning Resources, requires that "A COM must ensure access to learning resources to support its mission."
- Element 6.7, Self-Directed Learning, requires that "A COM must ensure that the curriculum includes self-directed learning experiences and time for independent study to

allow students to develop skills for lifelong learning. Self-directed learning includes students' self-assessment of learning needs; independent identification, analysis, and synthesis of relevant information; and appraisal of the credibility of sources of information."

- Element 7.1, Faculty and Staff Resources and Qualifications, states that "At all educational teaching sites, including affiliated sites, a COM must have sufficient faculty and staff resources to achieve the program mission, including part time and adjunct faculty, and preceptors who are appropriately trained and credentialed. The physician faculty, in the patient care environment, must hold current medical licensure and board certification/ board eligibility. The non-physician faculty must have appropriate qualifications in their fields."
- Element 7.6, Faculty Development, states that "A COM must develop and implement an ongoing needs-based, assessment-driven, faculty development program that is in keeping with the COM's mission."

Licensing exams of the National Board of Medical Examiners and the National Board of Osteopathic Medical Examiners do not specifically cover AI.[12] However, the benefits of AI-driven assessments for test preparation and scoring should be further explored, and their potential impacts on costs and student travel/time calculated, in addition to consideration of their inclusion as a topic area in exam content.

The Federation of State Medical Boards (FSMB) recently hosted a conference related to AI and potential impacts on state medical boards. AI can potentially be used to improve physician verification of licensing and credentials. Changes to state medical practice acts and/or model legislation may need to be studied to prepare for AI-driven changes to the practice of medicine.

The Common Program Requirements of the Accreditation Council for Graduate Medical Education (ACGME) do not specifically identify AI, but, as with UME standards from the LCME and COCA, related topics are addressed. Section VI.A.1.b).(2) notes that "access to data is essential to prioritizing activities for care improvement and evaluating success of improvement efforts." Also, Section VI.A.1.b).(2).(a) notes that "residents and faculty members must receive data on quality metrics and benchmarks related to their patient populations." Perhaps a more natural fit for addressing AI at the GME level could be applied through the pathways framework of the ACGME's Clinical Learning Environment Review (CLER) program, which offers programmatic feedback on the topics of patient safety, health care quality, care transitions, supervision, duty hours and fatigue management/mitigation, and professionalism.[13] Data science could be integrated into pathways for each focus area to support learners' exposure to AI-driven changes in clinical practice. Additionally, individual specialty milestones may be an appropriate location for introduction of artificial/augmented intelligence-driven technologies, many of which are specialty-specific.

None of the member boards of the American Board of Medical Specialties (ABMS) currently require education in AI activities for continuing certification credit. However, five boards[14]—the American Board of Anesthesiology, American Board of Emergency Medicine, American Board of Nuclear Medicine, American Board of Obstetrics and Gynecology, and American Board of Pathology—do accept simulation-based activities for their continuing certification Improvement in Medical Practice requirements (although it is important to note that simulation can be conducted without AI algorithms). In addition, the American Board of Family Medicine has several optional online simulated cases that can count toward meeting Lifelong Learning and Self-Assessment activities. The American Board of Internal Medicine also recognizes some simulation activities for Improvement in Medical Practice through a collaboration with the Accreditation Council for

Continuing Medical Education. Finally, the ABMS has established a new pathway for a subspecialty fellowship in clinical informatics, which is hosted through the American Board of Preventive Medicine.

At the continuing professional development level, AI offers great potential to create precision education via further investments in the adaptive quizzing model, which builds upon current trends in digital portfolios to support responsive assessments and prompts learners to assess specific skills at desired time points. Tailored educational content can be delivered to clinicians at precise moments in time, and AI-driven technologies may better identify the learning needs of busy clinicians than the clinicians themselves.

AI IN MEDICAL EDUCATION: A CURRENT SNAPSHOT

An LCME survey from the 2016-2017 academic year included a question asking institutions to indicate whether computer-based simulators (such as virtual dissection simulation) were used in various disciplines to assist students in learning or reviewing relevant anatomy. Of 145 respondents, 78 indicated simulators were used in gross anatomy, 65 in neuroanatomy/neurosciences, 42 in general surgery, 40 in obstetrics-gynecology, and 26 in surgical subspecialties (respondents could select more than one option).

Multiple forms of AI have been incorporated into medical education training, ranging from basic introductory courses in core data science and algorithm fundamentals to artificial intelligence certificate programs and dual areas of study (MD/DO plus data science, programming, statistics, informatics, or biomedical engineering). The overall extent to which these topics currently have been incorporated into medical education, however, is more difficult to quantify. The following list of examples, while not comprehensive, is meant to highlight the breadth and depth of current/planned utilization of AI in medical education today.

- The Duke Institute for Health Innovation (DIHI), which includes an incubator for health technology innovation, involves medical students in a program that joins clinical, quantitative, and data expertise to create care-enhancement technologies. DIHI students and instructors also work to ensure that AI innovations are not being applied to physicians, but rather developed by and for physicians, and that such innovations support improved models of care and incorporate machine learning into clinical processes. One example of an AI application is early identification of disease progression (such as kidney failure or sepsis).

- The radiology department at the University of Florida has entered into a partnership with a cancer-focused technology firm to develop computer-aided detection (CAD) tools for mammographers. Radiologists, including resident physicians, will be involved in the evaluation of trial technologies, which are intended to flag areas of interest in breast imaging. Residents also will participate in training and validating algorithms.

- The Carle Illinois College of Medicine in Urbana-Champaign, self-described as the first engineering-based college of medicine, seeks to leverage technology by offering a curriculum in which all courses are designed by a scientist, a clinical scientist, and an engineer. Engineering and technology comprise components of all classes, and clinical rounds are completed with both clinical and engineering faculty. The inaugural class will graduate in 2022.

- The Sharon Lund Medical Intelligence and Innovation Institute (MI3) at Children's Hospital of Orange County (CHOC) seeks to cultivate artificial intelligence methodologies and advances in genomic medicine, regenerative medicine, robotics, nanotechnology, and medical applications/devices. The MI3 Summer Internship Program at CHOC offers immersive experiences in genomic and personalized medicine, regenerative medicine and stem cells, nanomedicine, robotics and robotic surgery, artificial intelligence and big data, medical devices and mobile technology, and innovations in health care delivery. This program directly supports the pipeline of clinicians with exposure to AI technologies by inviting high school, college, graduate school, and medical school students to apply.

- The Institute for Innovations in Medical Education at New York University (NYU) Langone Health supports a multidisciplinary team of educators, scientists, informaticians, and software developers who apply informatics to teaching, learning, and assessment. NYU's technology-based Health Care by the Numbers curriculum trains students in the use of "big data" to provide holistic, population health management that improves quality and care coordination.

- The Machine Learning and Healthcare Lab at Johns Hopkins uses statistical machine learning techniques to develop new diagnostic and treatment planning tools that provide reliable inferences to help physicians make individualized care decisions.

- Stanford University's Center for Artificial Intelligence in Medicine and Imaging develops, assesses, and disseminates artificial intelligence systems to benefit patients. Graduates and post-graduates are involved in solving imaging problems using machine learning and other techniques. Stanford also offers a mini-curriculum leading to an Artificial Intelligence Graduate Certificate.

- The Human Diagnosis Project, a partnership of the AMA, the ABMS, and multiple academic centers, is an educational collaboration that sources knowledge via the submission of clinical cases from international medical professionals to create models of care that can be accessed by clinicians and learners worldwide.

- Addressing the paradigm shift in medical education, the University of Texas Dell Medical School does not support a chair of radiology or pathology; rather, leadership has identified and employed a chair of diagnostic medicine.

- The University of Virginia Center for Engineering in Medicine works, as stated in its mission, to generate and translate innovative ideas at the intersection of engineering and medicine. In this collaborative training environment, medical and nursing students are embedded in engineering labs, and engineering students are embedded in clinical environments.

- The College of Artificial Intelligence at the Massachusetts Institute of Technology focuses on interdisciplinary artificial intelligence education in biology, chemistry, history, linguistics, and ethics and is intended to bridge gaps between computer science and other areas.

- The AMA is expanding its educational resources related to AI in medicine to offer an educational module that provides the history, definitions, and components related to AI in health care, as well as a newly developed and continuously evolving website related to augmented intelligence in medicine, which provides resources, insights, and education.

Furthermore, the February 2019 Issue of the AMA's Journal of Ethics was devoted entirely to the ethical implications of AI.

International Attitudes

Steps also are being taken internationally to support the use of AI in medical education. For example, virtual patients are currently being used in medical schools in a number of European countries,[15] and individual schools offer programming in AI, such as the University of Toronto's elective, 14-month Computing for Medicine certificate course.[16]

It is interesting and important to note that attitudes regarding and progress toward use of AI in medical education and clinical treatment vary significantly internationally. Vayena et al. note a recent United Kingdom survey reporting that "63% of the adult population is uncomfortable with allowing personal data to be used to improve healthcare and is unfavorable to artificial intelligence (AI) systems replacing doctors and nurses in tasks they usually perform. Another study, conducted in Germany, found that medical students—the doctors of tomorrow—overwhelmingly buy into the promise of AI to improve medicine (83%) but are more skeptical that it will establish conclusive diagnoses in, for instance, imaging exams (56% disagree). When asked about the prospects of AI, United States decision-makers at healthcare organizations are confident that it will improve medicine, but roughly half of them think it will produce fatal errors, will not work properly, and will not meet currently hyped expectations."[17]

According to a recent survey[18] of general practitioners in the United Kingdom, 68 percent felt that "future technology" would never fully replace human physicians in diagnosis of patients, 61 percent said this technology would never fully replace human physicians when referring to specialists, 61 percent said this technology would never develop personalized treatment plans, and 94 percent said it would never deliver empathetic care. A higher percentage (80 percent) did believe, however, that future technology would be able to replace human physicians to perform documentation.

A 2018 survey of German medical students found that 68 percent were unaware of the specific technologies being used in radiology AI; 56 percent thought AI would not perform well enough to establish a definite diagnosis; 86 percent thought AI would improve radiology, and 83 percent disagreed that AI would replace human radiologists (96.6 percent disagreed that AI would replace human physicians generally). Further, 70.1 percent felt AI should be included in training (interestingly, 20.5 percent mostly disagreed with this statement, and 4.9 percent disagreed entirely).[19]

While European mores may not be translatable to faculty, learners, and patients in the United States, these findings are excellent reminders that different populations—in terms of race, ethnicity, gender, age, socioeconomic background, level of education, and geographic location—not only may have different levels of familiarity and comfort with these new technologies, but also may have different expectations and desires with regard to how or even whether these technologies should be applied. Physicians will need to augment their communication skills to help patients receive the best, personalized treatments that may be enhanced or delivered entirely by AI technologies.

REVIEW OF ADDITIONAL RESEARCH

A paper regarding the biannual Artificial Intelligence in Medicine (AIME) conference in Europe, established in 1985, analyzed the content of papers published in AIME's proceedings; the first six years the topic of knowledge engineering appeared most frequently. Post-2000, machine learning and data mining were covered most frequently. Natural language processing was covered more frequently moving towards 2010, as was research related to ontologies and terminologies.[20]

Kolachalama and Garg note that between 2010 and 2017, relatively little research was published on this topic related to UME and GME. They describe a combined search using the MeSH terms "machine learning" and "graduate medical education" between 2010 and 2017, which resulted in 16 publications, and note, "Detailed review of these papers revealed that none of them were actually focused on ML education for medical professionals."[12]

More research can be found related to virtual reality and augmented reality. A 2016 paper[21] found that learning outcomes improved more for students utilizing an online three-dimensional interactive learning tool (when compared to gross anatomy resources) for neuroanatomy education. Virtual reality and augmented reality have been found to enhance neurosurgery residents' skills while reducing risk to patients, and are also helpful for preoperative planning. Virtual reality and augmented reality also can increase learner engagement and enhance spatial knowledge.[22]

RELEVANT AMA POLICY

At this time, the AMA has limited policy related to AI and medical education. Its most recent policy, H-480.940, "Augmented Intelligence in Health Care," asks our AMA to promote development of thoughtfully designed, high-quality, clinically validated health care AI that encourages education for patients, physicians, medical students, other health care professionals, and health administrators to promote greater understanding of the promise and limitations of health care AI.

Policy D-295.330, "Update on the Uses of Simulation in Medical Education," encourages ongoing research and assessment regarding the effectiveness of simulation in teaching and assessment, and encourages accrediting bodies to ensure their policies are reflective of appropriate simulation use.

See the Appendix for a full list of relevant policies.

SUMMARY AND RECOMMENDATIONS

As stated in BOT Report 41-A-18, "To reap the benefits for patient care, physicians must have the skills to work comfortably with health care AI. Just as working effectively with EHRs is now part of training for medical students and residents, educating physicians to work effectively with AI systems, or more narrowly, the AI algorithms that can inform clinical care decisions, will be critical to the future of AI in health care." While it is certainly true that physicians and physicians in training must embrace the skills and attitudes that will allow them to care for patients with assistive technologies, it is also true, as noted by Patel et al., that "[a]ll technologies mediate human performance. Technologies, whether they be computer-based or in some other form, transform the ways individuals and groups behave. They do not merely augment, enhance or expedite performance, although a given technology may do all of these things. The difference is not one of quantitative change, but one that is qualitative in nature. Technology, tools, and artifacts not only enhance people's ability to perform tasks but also change the way they perform tasks." [23]

The Council on Medical Education therefore recommends that the following recommendations be adopted in lieu of Resolution 317-A-18 and the remainder of the report be filed:

1. That our American Medical Association (AMA) encourage accrediting and licensing bodies to study how AI should be most appropriately addressed in accrediting and licensing standards. (Directive to Take Action)

2. That our AMA encourage medical specialty societies and boards to consider production of specialty-specific educational modules related to AI. (Directive to Take Action)

3. That our AMA encourage research regarding the effectiveness of AI instruction in medical education on learning and clinical outcomes. (Directive to Take Action)

4. That our AMA encourage institutions and programs to be deliberative in the determination of when AI-assisted technologies should be taught, including consideration of established evidence-based treatments, and including consideration regarding what other curricula may need to be eliminated in order to accommodate new training modules. (Directive to Take Action)

5. That our AMA encourage stakeholders to provide educational materials to help learners guard against inadvertent dissemination of bias that may be inherent in AI systems. (Directive to Take Action)

6. That our AMA encourage enhanced training across the continuum of medical education regarding assessment, understanding, and application of data in the care of patients. (Directive to Take Action)

7. That our AMA encourage institutional leaders and academic deans to proactively accelerate the inclusion of nonclinicians, such as data scientists and engineers, onto their faculty rosters in order to assist learners in their understanding and use of AI. (Directive to Take Action)

8. That Policy D-295.328, “Promoting Physician Lifelong Learning,” be reaffirmed. (Reaffirm HOD Policy)

Fiscal note: $1,000.

APPENDIX: RELEVANT AMA POLICY

D-295.328, "Promoting Physician Lifelong Learning"

1. Our AMA encourages medical schools and residency programs to explicitly include training in and an evaluation of the following basic skills:

(a) the acquisition and appropriate utilization of information in a time-effective manner in the context of the care of actual or simulated patients;
(b) the identification of information that is evidence-based, including such things as data quality, appropriate data analysis, and analysis of bias of any kind;
(c) the ability to assess one's own learning needs and to create an appropriate learning plan;
(d) the principles and processes of assessment of practice performance;
(e) the ability to engage in reflective practice.

2. Our AMA will work to ensure that faculty members are prepared to teach and to demonstrate the skills of lifelong learning.

3. Our AMA encourages accrediting bodies for undergraduate and graduate medical education to evaluate the performance of educational programs in preparing learners in the skills of lifelong learning.

4. Our AMA will monitor the utilization and evolution of the new methods of continuing physician professional development, such as performance improvement and internet point-of-care learning, and work to ensure that the methods are used in ways that are educationally valid and verifiable.

5. Our AMA will continue to study how to make participation in continuing education more efficient and less costly for physicians.

D-295.313, "Telemedicine in Medical Education"

1. Our AMA encourages appropriate stakeholders to study the most effective methods for the instruction of medical students, residents, fellows and practicing physicians in the use of telemedicine and its capabilities and limitations.

2. Our AMA will collaborate with appropriate stakeholders to reduce barriers to the incorporation of telemedicine into the education of physicians and other health care professionals.

3. Our AMA encourages the Liaison Committee on Medical Education and Accreditation Council for Graduate Medical Education to include core competencies in telemedicine in undergraduate medical education and graduate medical education training.

D-295.330, "Update on the Uses of Simulation in Medical Education"

Our AMA will:

1. continue to advocate for additional funding for research in curriculum development, pedagogy, and outcomes to further assess the effectiveness of simulation and to implement effective approaches to the use of simulation in both teaching and assessment;

2. continue to work with and review, at five-year intervals, the accreditation requirements of the Liaison Committee on Medical Education (LCME), the Accreditation Council for Graduate Medical Education (ACGME), and the Accreditation Council for Continuing Medical Education (ACCME) to assure that program requirements reflect appropriate use and assessment of simulation in education programs;

3. encourage medical education institutions that do not have accessible resources for simulation-based teaching to use the resources available at off-site simulation centers, such as online simulated assessment tools and simulated program development assistance;

4. monitor the use of simulation in high-stakes examinations administered for licensure and certification as the use of new simulation technology expands;

5. further evaluate the appropriate use of simulation in interprofessional education and clinical team building; and

6. work with the LCME, the ACGME, and other stakeholder organizations and institutions to further identify appropriate uses for simulation resources in the medical curriculum.

H-315.969, "Medical Student Access to Electronic Health Records"

Our AMA:
(1) recognizes the educational benefits of medical student access to electronic health record (EHR) systems as part of their clinical training;

(2) encourages medical schools, teaching hospitals, and physicians practices used for clinical education to utilize clinical information systems that permit students to both read and enter information into the EHR, as an important part of the patient care team contributing clinically relevant information;

(3) encourages research on and the dissemination of available information about ways to overcome barriers and facilitate appropriate medical student access to EHRs and advocate to the Electronic Health Record Vendors Association that all Electronic Health Record vendors incorporate appropriate medical student access to EHRs;

(4) supports medical student acquisition of hands-on experience in documenting patient encounters and entering clinical orders into patients' electronic health records (EHRs), with appropriate supervision, as was the case with paper charting;

(5) (A) will research the key elements recommended for an educational Electronic Health Record (EHR) platform; and (B) based on the research--including the outcomes from the Accelerating Change in Medical Education initiatives to integrate EHR-based instruction and assessment into undergraduate medical education--determine the characteristics of an ideal software system that should be incorporated for use in clinical settings at medical schools and teaching hospitals that offer EHR educational programs;

(6) encourage efforts to incorporate EHR training into undergraduate medical education, including the technical and ethical aspects of their use, under the appropriate level of supervision;

(7) will work with the Liaison Committee for Medical Education(LCME), AOA Commission on Osteopathic College Accreditation (COCA) and the Accreditation Council for Graduate Medical

Education (ACGME) to encourage the nation's medical schools and residency and fellowship training programs to teach students and trainees effective methods of utilizing electronic devices in the exam room and at the bedside to enhance rather than impede the physician-patient relationship and improve patient care; and

(8) encourages medical schools and residency programs to: (a) design clinical documentation and electronic health records (EHR) training that provides evaluative feedback regarding the value and effectiveness of the training, and, where necessary, make modifications to improve the training; (b) provide clinical documentation and EHR training that can be evaluated and demonstrated as useful in clinical practice; and (c) provide EHR professional development resources for faculty to assure appropriate modeling of EHR use during physician/patient interactions.

H-480.940, "Augmented Intelligence in Health Care"

As a leader in American medicine, our AMA has a unique opportunity to ensure that the evolution of augmented intelligence (AI) in medicine benefits patients, physicians, and the health care community.

To that end our AMA will seek to:

1. Leverage its ongoing engagement in digital health and other priority areas for improving patient outcomes and physicians' professional satisfaction to help set priorities for health care AI.

2. Identify opportunities to integrate the perspective of practicing physicians into the development, design, validation, and implementation of health care AI.

3. Promote development of thoughtfully designed, high-quality, clinically validated health care AI that:
    a. is designed and evaluated in keeping with best practices in user-centered design, particularly for physicians and other members of the health care team;
    b. is transparent;
    c. conforms to leading standards for reproducibility;
    d. identifies and takes steps to address bias and avoids introducing or exacerbating health care disparities including when testing or deploying new AI tools on vulnerable populations; and
    e. safeguards patients' and other individuals' privacy interests and preserves the security and integrity of personal information.

4. Encourage education for patients, physicians, medical students, other health care professionals, and health administrators to promote greater understanding of the promise and limitations of health care AI.

5. Explore the legal implications of health care AI, such as issues of liability or intellectual property, and advocate for appropriate professional and governmental oversight for safe, effective, and equitable use of and access to health care AI.

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REPORT 6 OF THE COUNCIL ON MEDICAL EDUCATION (A-19)
Study of Medical Student, Resident, and Physician Suicide (Resolution 959-I-18)
(Reference Committee C)

EXECUTIVE SUMMARY

AMA Policy D-345.984 (1), "Study of Medical Student, Resident, and Physician Suicide," asks that the American Medical Association (AMA) determine the most efficient and accurate mechanism to study the actual incidence of medical student, resident, and physician suicide. Resolution 959-I-18, "Physician and Medical Student Mental Health and Suicide," asks that the AMA create a new Physician and Medical Student Suicide Prevention Committee with the goal of addressing suicides and behavioral health issues in physicians and medical students. This report considers appropriate deliverables to fulfill these directives and to further establish the AMA's leadership role in this area.

Burnout in physicians, residents, and medical students has been widely reported in recent years in both the lay and scholarly press, and incidence of depression and suicide is greater in medical students, residents, and physicians than in the general population. The AMA has studied the mental and physical toll that medical education exacts on medical students as they seek to balance their personal lives with the need to master a growing body of knowledge and develop the skills required to practice medicine. AMA policy addresses the long-standing and deeply ingrained stigma against physicians, residents, and students who seek care for either physical or behavioral health issues, partly due to concerns of career and licensure implications. Organizations such as the National Academy of Medicine, Federation of State Medical Boards, and Accreditation Council for Graduate Medical Education (ACGME) have begun to recognize the scope of this critical issue and are moving to address the problem. The AMA has also taken steps to decrease physician and medical trainee stress and improve professional satisfaction through resources such as the AMA's STEPS Forward™ practice improvement strategies and the Ed Hub™.

In addition to providing education resources for physicians, the AMA works with organizations to help them understand the incidence of burnout in their workplaces. Using data from the validated Mini-Z assessment tool enables the AMA to work with the organizations to identify solutions, which helps improve environmental, organizational, or cultural factors that, if not addressed, could lead to heightened stress or suicide risk for some.

The AMA is planning to partner with a leading academic medical institution to conduct a pilot study using data to be obtained from the National Death Index (NDI) to identify manner of death for a subset of the AMA Masterfile population. This research, planned for broad dissemination through publication in a peer-reviewed journal, will help the AMA identify opportunities to better help physicians, residents, and medical students reduce factors that contribute to suicidal ideation and ultimately could help reduce the number of lives lost to suicide each year. This analysis could also include comparison to the general U.S. population, comparison to rates of physician burnout, longitudinal evaluation for various cohorts, as well other variables allowed by the data. The manner of death data could also enable additional study into physician mortality trends, such as patterns of other disease states or geographic variations.

It will also be important for the AMA to monitor progress that has been made by the Association of American Medical Colleges and the ACGME to collect data on medical student, resident, and fellow suicides to identify patterns that could predict such events.

REPORT OF THE COUNCIL ON MEDICAL EDUCATION

CME Report 6-A-19

Subject: Study of Medical Student, Resident, and Physician Suicide (Resolution 959-I-18)

Presented by: Carol Berkowitz, MD, Chair

Referred to: Reference Committee C
(Nicole Riddle, MD, Chair)

AMA Policy D-345.984 (1), "Study of Medical Student, Resident, and Physician Suicide," asks:

> That our American Medical Association (AMA) determine the most efficient and accurate mechanism to study the actual incidence of medical student, resident, and physician suicide, and report back at the 2018 Interim Meeting of the House of Delegates (HOD) with recommendations for action.

Recognizing the importance and timeliness of this topic, the Council on Medical Education agreed that appropriate resources should be dedicated to identifying mechanisms for study, noting that meaningful and constructive review of this issue, and of the work done to date by other organizations, required additional time. Accordingly, this report was moved to the 2019 Annual Meeting.

This report also addresses Resolution 959-I-18, "Physician and Medical Student Mental Health and Suicide," introduced by the Indiana Delegation and referred by the AMA HOD; it asks:

> That our AMA create a new Physician and Medical Student Suicide Prevention Committee with the goal of addressing suicides and mental health disease in physicians and medical students. This committee will be charged with:
> 1) Developing novel policies to decrease physician and medical trainee stress and improve professional satisfaction.
> 2) Vociferous, repeated, and widespread messaging to physicians and medical students encouraging those with mood disorders to seek help.
> 3) Working with state medical licensing boards and hospitals to help remove any stigma of mental health disease and to alleviate physician and medical student fears about the consequences of mental illness and their medical license and hospital privileges.
> 4) Establishing a 24-hour mental health hotline staffed by mental health professionals whereby a troubled physician or medical student can seek anonymous advice. Communication via the 24-hour help line should remain anonymous. This service can be directly provided by the AMA or could be arranged through a third party, although volunteer physician counselors may be an option for this 24-hour phone service.

BACKGROUND

Burnout in physicians, residents, and medical students has been widely reported in recent years in both the lay and scholarly press, and incidence of depression and suicide is greater in medical students, residents, and physicians than the general population.[1-7] A recent study conducted by the

AMA, Stanford University School of Medicine, and Mayo Clinic shows rates of physician burnout in 2017 declined to 44 percent from 54 percent in 2014.[8] While burnout may have declined to levels present in 2011, the proportion of physicians screening positive for depression has modestly increased to nearly 42 percent.[8] Medical school and residency are stressful periods of physician training, each with their own dynamic. Many medical students experience substantial distress, which contributes to a decline in mental health and well-being. The American Medical Student Association reports that medical students are three times more likely to commit suicide than the rest of the general population in their age range in other educational settings.[4] Residents and practicing physicians also experience depression and burnout, and because they often lack a regular source of care, face barriers to the prompt diagnosis and treatment of behavioral disorders.[9] Stress, depression, and burnout are risk factors for suicidal ideation and suicide deaths.[9]

Resources such as hotlines exist for individuals experiencing suicidal ideation and are available from a number of reputable local, state, and national sources. In a recent Medscape report, based on a survey of more than 15,000 physicians in 29 specialties, 14 percent of respondents indicated that they had felt suicidal, and one percent had attempted suicide.[10] More than half of physicians who had thoughts of suicide told someone (therapist, family member, friend/colleague), but only two percent who had thoughts of suicide used a suicide hotline.[10]

Institutions and physician associations have begun to recognize the scope of this critical issue and are moving to address the problem.[11-12] The National Academy of Medicine's Action Collaborative on Clinician Well-Being and Resilience is exploring recommendations in this regard, working with more than 150 health care organizations to raise visibility about clinician burnout and developing a commentary that calls on health systems to consider hiring chief wellness officers.[13]

QUANTIFYING THE RATES OF PHYSICIAN SUICIDE

As early as the late 19th century,[14-18] and throughout the 20th and 21st centuries, reports quantifying the rates of physician suicide have been presented in health care journals and industry publications, and more recently in mainstream media. Studies of physician suicide rates compared to the general U.S. population have resulted in conflicting conclusions—some indicating physicians are more prone to suicide, and others demonstrating no significant difference. Medical student and resident/fellow deaths have been studied in more recent years. Inclusion of a literature review in this report is important to demonstrate the various modes of study and sources of data over time, and the implications of study methods for future efforts to quantify physician, resident/fellow, and medical student suicide rates.

In the late 1800s and into the 20th century, the primary source of data on physician deaths used by researchers was the AMA's Deceased Physicians file, which provided information on hundreds of thousands of deceased physicians from the early 19th century to the mid-1960s.[19-21] The cause of death listed in the records was obtained by various means, including *JAMA* obituaries, which cited death certificates and autopsy reports.[22-23] For example, one study published in 1926 concluded from AMA's data that the suicide rate of white male physicians in the U.S. was 45.4 out of 100,000.[24] Another study, using AMA's records from 1967 to 1972, showed the rates of suicide in American female physicians was 40.7 per 100,000, higher than male physician suicides during the same time range.[25] A study of death certificates in California from 1959 to 1961 found that physicians and health care workers were twice as prone to commit suicide when compared to the general population.[20] A 1977 *JAMA* article claimed that physicians took their own lives at a rate equivalent to one medical school class each year, but cited no specific number or source for this information.[26]

In the later part of the 20th century, researchers began using the National Occupational Mortality Surveillance (NOMS) database to identify causes of death for physicians, which was deemed a more accurate and reliable source than the AMA information.[27-28] The data in NOMS is sourced from state vital records (death certificates) and lists the proportionate mortality ratio for the total population.[29] The Social Security Death Index, another source of mortality information used by researchers, records the deaths of anyone in the U.S. who was issued a social security number. The Centers for Disease Control and Prevention (CDC) has several databases featuring varying degrees and descriptions of mortality and manner of death information. The CDC in 2016 published a study of suicides in 17 states using cause of death information from the National Violent Death Reporting System. This limited study concluded that the suicide rate for health care practitioners was 17.4 per 100,000 population.[30] This study was later found to have included erroneous data, however, and the authors are reanalyzing the findings.

Most of these studies call out limitations in the availability, reliability, and consistency of the data used to identify causes of death and occupation. A test of accuracy of the *JAMA* obituaries was conducted on a small sample, and it was determined that only half of the causes of death listed were accurate when compared with records from the state's department of health computerized records.[19] *JAMA*'s editor, in a quoted communication, alluded to the incompleteness of the obituary data and acknowledged that this was in part because some suicides may be listed on a death certificate or autopsy report as something other than suicide, such as respiratory failure.[31] *JAMA* also would not include the cause of death if requested by the family of the deceased physician, further limiting the completeness of the records.[28] Even death certificates, the primary vital record used by secondary sources, are not 100 percent consistent, accurate, or complete. Studies have found errors in manner of death certification in approximately 33 percent to 41 percent of cases.[32-34] Other studies have demonstrated variance in how different medical examiners interpret facts surrounding a decedent's death and how they ultimately report manner of death.[35-36]

SOURCES FOR COLLECTING DATA TO STUDY SUICIDE STATISTICS IN THE UNITED STATES

The databases and reports shown in Table 1 were identified as sources for collecting data to study suicide statistics in the United States.

Table 1. Sources for Data on Suicide Statistics in the United States

Source	Type of Data
Centers for Disease Control and Prevention	Fatal Injury Reports Leading Cause of Death Reports Mortality Reports National Vital Statistics System National Violent Death Reporting System National Occupational Mortality Surveillance Wide-ranging Online Data for Epidemiologic Research National Death Index
American Medical Association	JAMA Obituaries Deceased Physicians Masterfile (1906-present) Directory of Deceased American Physicians Vols. 1 & 2 (1804-1929)
World Health Organization	Compiled from member state local databases

Department of Defense	Department of Defense Suicide Event Annual Reports
Department of Veterans Affairs	National Suicide Data Report
Bureau of Justice Statistics	Suicide and Homicide in State Prisons and Local Jails
Social Security Administration	Social Security Death Index
Other	State and Local Vital Records; Legacy Obit

Although generally reliable, some inconsistency also exists in the recording of a deceased person's primary occupation, somewhat limiting the ability of researchers to accurately determine rates of suicide among specific populations, such as physicians, residents, or medical students. Occupation has long been a captured data point on death certificates, but it has not always been codified, utilized, and monitored the way it is today.[37] More recently, occupation and industry information have become more reliable.[38] Occupation information can now be recorded in most electronic health records (EHRs), helping to capture accurate information on the death certificates, but it is not required, and evidence shows it may not be consistently used.[39-41]

Studies have shown that suicide is likely under-reported due to a lack of systematic approaches to reporting and assessing the statistics.[42] Experts have also observed that cultural attitudes toward suicide determine how suicide is defined and how "intention to die" is legally interpreted.[43] These effects, as well as differing procedures for obtaining evidence about the death, cause coroners to vary in their definitions and reporting processes. Some believe this variation makes official statistics valueless and too unreliable to compare the suicide rates of countries, districts, or of demographic and other groups; to discern trends; or to investigate the social relations of suicide. However, other researchers disagree and have concluded that, despite inconsistency, the statistics still have utility.[44]

RELEVANT WORK OF OTHER ORGANIZATIONS

Accreditation Council for Graduate Medical Education

In 2017 the Accreditation Council for Graduate Medical Education (ACGME) studied the number and causes of resident deaths by matching their deceased resident data with cause of death information obtained from the National Death Index (NDI), a comprehensive database managed by the CDC. From this research they identified suicide as the leading cause of death for male trainees, the second leading cause for female trainees, and the second leading cause of death overall.[45] The cause of death data sourced from the NDI produced a 94 percent match to records in the ACGME's database, suggesting that these data represent an accurate and reliable source that could be used for future study.

National Academy of Medicine

The National Academy of Medicine's Action Collaborative on Clinician Well-Being and Resilience recently launched the Clinician Well-Being Knowledge Hub. The Hub is intended to provide resources to help organizations learn more about clinician burnout and solutions.[13] The repository contains peer-reviewed research, toolkits, and other resources for health system administrators and clinicians.

American Foundation for Suicide Prevention

The American Foundation for Suicide Prevention (AFSP) has developed an Interactive Screening Program (ISP), which is in place for use by institutions of higher education, including undergraduate and medical schools, and which has been customized for use by workforces in multiple industries.[46] This initiative identifies individuals who may be at risk for suicide by offering them the opportunity to participate in an anonymous online screening.

UC San Diego Health Education Assessment and Referral Program

The UC San Diego Health Education Assessment and Referral (HEAR) Program, in collaboration with the AFSP, also provides a program of ongoing education and outreach, which encourages medical students, residents, and faculty, as well as pharmacists, nurses, and other clinical staff, to engage in an online, anonymous, interactive screening program.[47] The AFSP program model has been adopted by many schools of medicine and is used by clinicians of all disciplines.

Other Organizations

The AMA, American Osteopathic Association, and state and specialty medical associations are also positioned to help alleviate physician stress and burnout. CME Report 1-I-16, "Access to Confidential Health Services for Medical Students and Physicians,"[48] provides an overview of potential solutions by several key stakeholders including accrediting agencies, medical schools, residency/fellowship programs, employers, hospitals, and professional associations, including the AMA.

RELEVANT WORK OF THE AMA

The AMA has studied the mental and physical toll that medical education exacts on medical students and resident/fellow physicians as they seek to balance their personal lives with the need to master a growing body of knowledge and develop the skills required to practice medicine. Specific AMA policy mandates and recommendations related to this topic are shown in the Appendix. AMA policy also addresses the long-standing and deeply ingrained stigma against physicians and students who seek care for either physical or behavioral health issues, partly due to concerns of career and licensure implications.

Work of Professional Satisfaction and Practice Sustainability (PS2) and STEPS Forward™

The AMA is already taking steps to decrease physician and medical student/trainee stress and improve professional satisfaction through resources such as the STEPS Forward™ practice improvement module, "Preventing Physician Distress and Suicide," which offers targeted education for practicing physicians seeking information about how to help their physician colleagues who may need support. The AMA is also developing an education module that will help physicians, residents, and medical students learn about the risks of physician suicide, identify characteristics to look for in patients who may be at risk of harming themselves, and recognize the warning signs of potential suicide risk in colleagues. The module, to be offered with continuing medical education credit on the AMA's Ed Hub™, will also provide tools and resources to guide learners in supporting at-risk patients and colleagues.

In addition to education resources for physicians, the AMA works with organizations to help them understand the incidence of burnout in their workplaces. Using the validated Mini-Z assessment tool, organizations are assigned a burnout score, along with targeted data on culture and workplace

efficiency factors that can lead to stress and burnout for physicians. These data enable the AMA to work with the organizations to identify solutions, helping improve environmental, organizational, or cultural factors that, if not addressed, could lead to heightened stress or suicide risk for some.

Accelerating Change in Medical Education

Schools in the AMA's Accelerating Change in Medical Education Consortium formed a student wellness interest group to share ideas across schools about best practices to ensure wellness and counter burnout. The results of a wellness survey conducted among medical school consortium members showed that 81 percent of respondents employ an individual tasked with focusing on student wellness to at least some extent; these roles range from program coordinators to graduate assistants to deans who also serve as wellness directors. Most schools had dedicated wellness committees, with budgets up to $7,000 annually.

DISCUSSION

Overall, the available literature suggests that obtaining both accurate manner of death and specific occupation information is the most reliable means of quantifying rates of suicide among physicians. However, most researchers still face challenges with this approach. Primary barriers include:

- Cost and limitations of obtaining and using the data from reliable sources;
- Irregular/restricted access to mortality information, including date, cause, and manner of death;
- Inconsistency in medical examiner interpretation of cause/manner of death;
- Lack of standard physician and medical examiner/coroner training on completion of the death certificate;
- Possible underutilization of standard code-sets to report manner of death;
- Social or cultural stigma associated with reporting a death as a suicide;
- Underutilization of "occupation" field in electronic heath records; and
- Inaccurate or inconsistent assignment of occupation upon death.

Physician-focused Programs and Resources

Resolution 959-I-18 asks the AMA to create a committee tasked with establishing a 24-hour mental health hotline for physicians and medical students to access when in need. Establishing and maintaining a mental health hotline is resource intensive, requiring investments in staffing, infrastructure, management, training, costs of licensing, and accreditation to operate. Operating the Crisis Call Center, a backup center for the National Suicide Prevention Lifeline, costs approximately $1.1 million per year.[49] A smaller, Louisiana based non-profit operation, which also fields calls directed from the national lifeline, operates on $350,000 per year.[49] Most of the funding for local services comes from county and city sources, as well as in-kind and private donations. Accredited programs may receive a small stipend from the Substance Abuse and Mental Health Services Association. Due to limited available funds, many programs rely on volunteers more than paid staff.[50-51] In addition to substantial costs, establishing a new, physician-focused mental health line may introduce potential liabilities for the AMA. Considering the extensive resources involved, the potential for liability, and demonstrated low rates of usage,[10] it is not recommended that the AMA pursue an independent mental health hotline at this time. However, the AMA has evaluated Employee Assistance Program (EAP) service providers to explore the option of piloting a service to AMA members as a membership benefit. Some EAP services provide participants with 24/7 telephone or video access to qualified and trained counselors, wellness services, and critical

incident support. This evaluation is in its early stages, and a decision to pursue various options will be considered.

Removing the Stigma Associated With Behavioral Health Treatment

Resolution 959-I-18 also asks the AMA to create a committee to work with state medical licensing boards and hospitals to help remove any stigma of behavioral health and to alleviate physician and medical student fears about the consequences of behavioral health treatment on their medical license and hospital privileges. In addition to multiple policies expressing the AMA's commitment to resolving this issue, CME Report 6-A-18, "Mental Health Disclosures on Physician Licensing Applications," adopted at the 2018 Annual HOD Meeting, addressed concerns that have been raised about the presence and phrasing of questions on licensing applications related to current or past impairment. These questions may be discouraging physicians from seeking appropriate treatment because of fear of stigmatization, public disclosure, and the effect on one's job due to licensing or credentialing concerns.[52] Many medical and osteopathic licensing boards recognize that the manner in which they evaluate the fitness of potential licensees has the potential to create a barrier that prevents licensees from seeking help. Some state boards, such as the Oregon and Washington State Medical Boards, have taken steps to address these barriers. In addition, the Federation of State Medical Boards has established a Workgroup on Physician Wellness and Burnout. The workgroup is addressing symptoms that arise from the practice of medicine for which physicians may be reluctant to seek treatment due to concern about the presence and phrasing of questions on licensing applications about behavioral health, substance abuse, and leave from practice. The workgroup is also seeking to draw an important distinction between physician "illness" and "impairment" as well as determine whether it is necessary for the medical boards to include probing questions about a physician applicant's behavioral health on licensing applications in the interests of patient safety.

Current and Planned AMA Efforts

<u>Updating the AMA Physician Masterfile for Research</u>

The AMA's Deceased Physician database, which includes records of deceased physicians dating back to 1804, includes 242,541 physicians (as of January 2019). Currently only 107 records have a manner of death listed. This information is not made available on a consistent basis by the sources the Masterfile team relies on for mortality information. To capture the manner of death information needed to pursue relevant research, the Masterfile needs to be supplemented with third-party information that is made available at the individual level. To advance research in quantifying rates of physician suicide, as well as to identify patterns, risk factors, and methods by which to prevent suicides, the AMA is exploring options to enhance its Physician Masterfile data by collecting and maintaining manner of death information for physicians listed as deceased.

The AMA is partnering with a leading academic medical institution to conduct a pilot study using data from the National Death Index (NDI) to identify manner of death for a subset of the AMA Masterfile population. The goals of this initial research are to study and quantify incidence of suicide among physicians, residents, and medical students, and to evaluate the quality and reliability of the NDI data to determine if they represent a viable and cost-effective source for further, long-term study. Results from this research are anticipated by the end of 2019. In addition to staffing, establishment of processes, and ongoing data security requirements, there are financial costs for the procurement of these data from the NDI. Obtaining the data for the planned 2019 study will cost between $65,000 and $80,000. Obtaining NDI data for all individuals whose date of death occurred from 1979 through 2017 (the years for which NDI data is available) would require

approximately $600,000. Based on the average number of records updated as deceased in the Masterfile each year, requesting future NDI data every year for long-term study would cost approximately $30,000 per year.

This research, planned for broad dissemination through publication in a peer-reviewed journal, will assist the AMA in identifying opportunities to better help physicians, residents, and medical students reduce factors that contribute to suicidal ideation and ultimately could help reduce the number of lives lost each year. This analysis could also include comparison to the general US population, comparison to rates of physician burnout, and longitudinal evaluation for various cohorts, as well other variables allowed by the data. The manner of death data could also enable additional study into physician mortality trends, such as patterns of other disease states or geographic variations.

Other data sources were explored during the preparation of this report, including the National Occupational Mortality Surveillance, Social Security Administration Death Index, National Violent Death Reporting System, National Association for Public Health Statistics and Information Systems, and the CDC Wide-ranging OnLine Data for Epidemiologic Research. While these sources are valuable for observing aggregate data, none allows access to the individual-level information needed to match records in the Masterfile or conduct research rigorous enough to accurately quantify the incidence of suicide among physicians.

Ongoing Data Collection

Collecting manner of death information on an ongoing basis will be important should the AMA choose to continue long-term study of physician suicide. In addition to the NDI data previously outlined, the AMA is continuously exploring sources and potential new mechanisms through which the Masterfile team can obtain the manner of death information for ongoing updates.

At its 2018 Interim Meeting, the AMA adopted policy that urges the Liaison Council on Medical Education (LCME) and the ACGME to collect data on medical student and resident/fellow suicides to enable these organizations and the AMA to better identify patterns that could predict, and ultimately prevent, further suicides. In response, the LCME voted at its February 2019 meeting not to participate in the data-gathering requested through the AMA policy, in that the LCME felt that such data gathering and analysis was beyond its purview. A current LCME standard requires medical schools to include programs that promote student well-being. The AMA will continue to monitor progress made by the AAMC and ACGME on this and related objectives.

Creating a Physician and Medical Student Suicide Prevention Committee

Resolution 959-I-18 asks the AMA to create a committee with the goal of addressing suicides and behavioral health in physicians and medical students. As noted above, the AMA has already carried out extensive and sustained work in developing policy, communications, and resources to decrease physician and medical trainee stress, improve professional satisfaction, and decrease the stigma associated with mental illness that physicians may face when applying for licensure and hospital privileges. As also noted above, the AMA has explored the establishment of a 24-hour mental health hotline for physicians and medical students and is currently exploring EAP service providers that provide 24/7 access to counselors, wellness services, and critical incident support. For these reasons, the formation of a new committee would duplicate existing AMA efforts, and the Council on Medical Education believes that such a body is not necessary at this time.

SUMMARY AND RECOMMENDATIONS

The routine occurrence of burnout, depression, and suicide in physicians, residents/fellows, and medical students warrants continued study. Several recommendations have been offered to collect data on the actual incidence of physician and physician-in-training suicide. The Council on Medical Education therefore recommends the following recommendations be adopted in lieu of Resolution 959-I-18 and the remainder of this report be filed.

1. That our American Medical Association (AMA) explore the viability and cost-effectiveness of regularly collecting National Death Index (NDI) data and maintaining manner of death information for physicians, residents, and medical students listed as deceased in the AMA Physician Masterfile for long-term studies. (Directive to Take Action)

2. That our AMA monitor progress by the Association of American Medical Colleges and the Accreditation Council for Graduate Medical Education (ACGME) to collect data on medical student and resident/fellow suicides to identify patterns that could predict such events. (Directive to Take Action)

3. That our AMA supports the education of faculty members, residents and medical students in the recognition of the signs and symptoms of burnout and depression and supports access to free, confidential, and immediately available stigma-free behavioral health services. (Directive to Take Action)

4. That our AMA collaborate with other stakeholders to study the incidence of suicide among physicians, residents, and medical students. (Directive to Take Action)

5. That Policy D-345.984, “Study of Medical Student, Resident, and Physician Suicide,” be rescinded, as having been fulfilled by this report and through requests for action by the Liaison Committee on Medical Education and ACGME. (Rescind HOD Policy)

Fiscal Note: $81,500.

APPENDIX: RELEVANT AMA POLICIES

9.3.1, "Physician Health & Wellness"

When physician health or wellness is compromised, so may the safety and effectiveness of the medical care provided. To preserve the quality of their performance, physicians have a responsibility to maintain their health and wellness, broadly construed as preventing or treating acute or chronic diseases, including mental illness, disabilities, and occupational stress.

To fulfill this responsibility individually, physicians should:

(a) Maintain their own health and wellness by:

(i) following healthy lifestyle habits;

(ii) ensuring that they have a personal physician whose objectivity is not compromised.

(b) Take appropriate action when their health or wellness is compromised, including:

(i) engaging in honest assessment of their ability to continue practicing safely;

(ii) taking measures to mitigate the problem;

(iii) taking appropriate measures to protect patients, including measures to minimize the risk of transmitting infectious disease commensurate with the seriousness of the disease;

(iv) seeking appropriate help as needed, including help in addressing substance abuse. Physicians should not practice if their ability to do so safely is impaired by use of a controlled substance, alcohol, other chemical agent or a health condition.

Collectively, physicians have an obligation to ensure that colleagues are able to provide safe and effective care, which includes promoting health and wellness among physicians.

(Issued: 2016)

D-345.984, "Study of Medical Student, Resident, and Physician Suicide "

Our AMA will: (1) determine the most efficient and accurate mechanism to study the actual incidence of medical student, resident, and physician suicide, and report back at the 2018 Interim Meeting of the House of Delegates with recommendations for action; and (2) request that the Liaison Committee on Medical Education and the Accreditation Council for Graduate Medical Education collect data on medical student, resident and fellow suicides to identify patterns that could predict such events.

(Res. 019, A-18 Appended: Res. 951, I-18)

H-295.858, "Access to Confidential Health Services for Medical Students and Physicians"

1. Our AMA will ask the Liaison Committee on Medical Education, Commission on Osteopathic College Accreditation, American Osteopathic Association, and Accreditation Council for Graduate Medical Education to encourage medical schools and residency/fellowship programs, respectively, to: A. Provide or facilitate the immediate availability of urgent and emergent access to low-cost, confidential health care, including mental health and substance use disorder counseling services, that: (1) include appropriate follow-up; (2) are outside the trainees' grading and evaluation pathways; and (3) are available (based on patient preference and need for assurance of confidentiality) in reasonable proximity to the education/training site, at an external site, or through telemedicine or other virtual, online means; B. Ensure that residency/fellowship programs are abiding by all duty hour restrictions, as these regulations exist in part to ensure the mental and physical health of trainees; C. Encourage and promote routine health screening among medical students and resident/fellow physicians, and consider designating some segment of already-allocated personal time off (if necessary, during scheduled work hours) specifically for routine health screening and preventive services, including physical, mental, and dental care; and D. Remind trainees and practicing physicians to avail themselves of any needed resources, both within and external to their institution, to provide for their mental and physical health and well-being, as a component of their professional obligation to ensure their own fitness for duty and the need to prioritize patient

safety and quality of care by ensuring appropriate self-care, not working when sick, and following generally accepted guidelines for a healthy lifestyle.

2. Our AMA will urge state medical boards to refrain from asking applicants about past history of mental health or substance use disorder diagnosis or treatment, and only focus on current impairment by mental illness or addiction, and to accept "safe haven" non-reporting for physicians seeking licensure or relicensure who are undergoing treatment for mental health or addiction issues, to help ensure confidentiality of such treatment for the individual physician while providing assurance of patient safety.
3. Our AMA encourages medical schools to create mental health and substance abuse awareness and suicide prevention screening programs that would:
    A. be available to all medical students on an opt-out basis;
    B. ensure anonymity, confidentiality, and protection from administrative action;
    C. provide proactive intervention for identified at-risk students by mental health and addiction professionals; and
    D. inform students and faculty about personal mental health, substance use and addiction, and other risk factors that may contribute to suicidal ideation.
4. Our AMA: (a) encourages state medical boards to consider physical and mental conditions similarly; (b) encourages state medical boards to recognize that the presence of a mental health condition does not necessarily equate with an impaired ability to practice medicine; and (c) encourages state medical societies to advocate that state medical boards not sanction physicians based solely on the presence of a psychiatric disease, irrespective of treatment or behavior.
5. Our AMA: (a) encourages study of medical student mental health, including but not limited to rates and risk factors of depression and suicide; (b) encourages medical schools to confidentially gather and release information regarding reporting rates of depression/suicide on an opt-out basis from its students; and (c) will work with other interested parties to encourage research into identifying and addressing modifiable risk factors for burnout, depression and suicide across the continuum of medical education.
6. Our AMA encourages the development of alternative methods for dealing with the problems of student-physician mental health among medical schools, such as: (a) introduction to the concepts of physician impairment at orientation; (b) ongoing support groups, consisting of students and house staff in various stages of their education; (c) journal clubs; (d) fraternities; (e) support of the concepts of physical and mental well-being by heads of departments, as well as other faculty members; and/or (f) the opportunity for interested students and house staff to work with students who are having difficulty. Our AMA supports making these alternatives available to students at the earliest possible point in their medical education.
7. Our AMA will engage with the appropriate organizations to facilitate the development of educational resources and training related to suicide risk of patients, medical students, residents/fellows, practicing physicians, and other health care professionals, using an evidence-based multidisciplinary approach.

(CME Rep. 01, I-16 Appended: Res. 301, A-17 Appended: Res. 303, A-17 Modified: CME Rep. 01, A-18 Appended: Res. 312, A-18)

H-295.927, "Medical Student Health and Well-Being"

The AMA encourages the Association of American Medical Colleges, Liaison Committee on Medical Education, medical schools, and teaching hospitals to address issues related to the health and well-being of medical students, with particular attention to issues such as HIV infection that may have long-term implications for health, disability and medical practice, and consider the feasibility of financial assistance for students with disabilities.

(BOT Rep. 1, I-934 Modified with Title Change: CSA Rep. 4, A-03 Reaffirmed: CME Rep. 2, A-13)

H-295.993, "Inclusion of Medical Students and Residents in Medical Society Impaired Physician Programs"

Our AMA: (1) recognizes the need for appropriate mechanisms to include medical students and resident physicians in the monitoring and advocacy services of state physician health programs and wellness and other programs to prevent impairment and burnout; and (2) encourages medical school administration and students to work together to develop creative ways to inform students concerning available student assistance programs and other related services.
(Sub. Res. 84, I-82 Reaffirmed: CLRPD Rep. A, I-92 Reaffirmed and appended: CME Rep. 4, I-98 Reaffirmed: CME Rep. 2, A-08 Modified: CME Rep. 01, A-18)

H-310.907, "AMA Duty Hours Policy"

Our AMA adopts the following Principles of Resident/Fellow Duty Hours, Patient Safety, and Quality of Physician Training:
3. Our AMA encourages publication and supports dissemination of studies in peer-reviewed publications and educational sessions about all aspects of duty hours, to include such topics as extended work shifts, handoffs, in-house call and at-home call, level of supervision by attending physicians, workload and growing service demands, moonlighting, protected sleep periods, sleep deprivation and fatigue, patient safety, medical error, continuity of care, resident well-being and burnout, development of professionalism, resident learning outcomes, and preparation for independent practice.
(CME Rep. 5, A-14 Modified: CME Rep. 06, I-18)

D-310.968, "Physician and Medical Student Burnout"

1. Our AMA recognizes that burnout, defined as emotional exhaustion, depersonalization, and a reduced sense of personal accomplishment or effectiveness, is a problem among residents, and fellows, and medical students.
2. Our AMA will work with other interested groups to regularly inform the appropriate designated institutional officials, program directors, resident physicians, and attending faculty about resident, fellow, and medical student burnout (including recognition, treatment, and prevention of burnout) through appropriate media outlets.
3. Our AMA will encourage the Accreditation Council for Graduate Medical Education and the Association of American Medical Colleges to address the recognition, treatment, and prevention of burnout among residents, fellows, and medical students.
4. Our AMA will encourage further studies and disseminate the results of studies on physician and medical student burnout to the medical education and physician community.
5. Our AMA will continue to monitor this issue and track its progress, including publication of peer-reviewed research and changes in accreditation requirements.
6. Our AMA encourages the utilization of mindfulness education as an effective intervention to address the problem of medical student and physician burnout.

(CME Rep. 8, A-07 Modified: Res. 919, I-11)

H-405.957, "Programs on Managing Physician Stress and Burnout"

1. Our American Medical Association supports existing programs to assist physicians in early identification and management of stress and the programs supported by the AMA to assist physicians in early identification and management of stress will concentrate on the physical, emotional and psychological aspects of responding to and handling stress in physicians' professional and personal lives, and when to seek professional assistance for stress-related difficulties.

2. Our AMA will review relevant modules of the STEPs Forward Program and also identify validated student-focused, high quality resources for professional well-being, and will encourage the Medical Student Section and Academic Physicians Section to promote these resources to medical students.

(Res. 15, A-15 Appended: Res. 608, A-16)

H-405.961, "Physician Health Programs"

Our AMA affirms the importance of physician health and the need for ongoing education of all physicians and medical students regarding physician health and wellness.
(CSAPH Rep. 2, A-11 Reaffirmed in lieu of Res. 412, A-12 Reaffirmed: BOT action in response to referred for decision Res. 403, A-12)

D-405.990, "Educating Physicians About Physician Health Programs"

1) Our AMA will work closely with the Federation of State Physician Health Programs (FSPHP) to educate our members as to the availability and services of state physician health programs to continue to create opportunities to help ensure physicians and medical students are fully knowledgeable about the purpose of physician health programs and the relationship that exists between the physician health program and the licensing authority in their state or territory; 2) Our AMA will continue to collaborate with relevant organizations on activities that address physician health and wellness; 3) Our AMA will, in conjunction with the FSPHP, develop state legislative guidelines addressing the design and implementation of physician health programs; and 4) Our AMA will work with FSPHP to develop messaging for all Federation members to consider regarding elimination of stigmatization of mental illness and illness in general in physicians and physicians in training.
(Res. 402, A-09 Modified: CSAPH Rep. 2, A-11 Reaffirmed in lieu of Res. 412, A-12 Appended: BOT action in response to referred for decision Res. 403, A-12)

H-345.973, "Medical and Mental Health Services for Medical Students and Resident and Fellow Physicians"

Our AMA promotes the availability of timely, confidential, accessible, and affordable medical and mental health services for medical students and resident and fellow physicians, to include needed diagnostic, preventive, and therapeutic services. Information on where and how to access these services should be readily available at all education/training sites, and these services should be provided at sites in reasonable proximity to the sites where the education/training takes place.
(Res. 915, I-15 Revised: CME Rep. 01, I-16)

H-275.970, Licensure Confidentiality

1. The AMA (a) encourages specialty boards, hospitals, and other organizations involved in credentialing, as well as state licensing boards, to take all necessary steps to assure the confidentiality of information contained on application forms for credentials; (b) encourages boards to include in application forms only requests for information that can reasonably be related to medical practice; (c) encourages state licensing boards to exclude from license application forms information that refers to psychoanalysis, counseling, or psychotherapy required or undertaken as part of medical training; (d) encourages state medical societies and specialty societies to join with the AMA in efforts to change statutes and regulations to provide needed confidentiality for information collected by licensing boards; and (e) encourages state licensing boards to require disclosure of physical or mental health conditions only when a physician is suffering from any condition that currently impairs his/her judgment or that would otherwise adversely affect his/her ability to practice medicine in a competent, ethical, and professional manner, or when the physician presents a public health danger.

2. Our AMA will encourage those state medical boards that wish to retain questions about the health of applicants on medical licensing applications to use the language recommended by the Federation of State Medical Boards that reads, "Are you currently suffering from any condition for which you are not being appropriately treated that impairs your judgment or that would otherwise adversely affect your ability to practice medicine in a competent, ethical and professional manner? (Yes/No)."
CME Rep. B, A-88 Reaffirmed: BOT Rep. 1, I-93 CME Rep. 10 - I-94 Reaffirmed: CME Rep. 2, A-04 Reaffirmed: CME Rep. 2, A-14 Appended: CME Rep. 06, A-18

D-295.319, Discriminatory Questions on Applications for Medical Licensure
Our American Medical Association will work with the Federation of State Medical Boards and other appropriate stakeholders to develop model language for medical licensure applications which is non discriminatory and which does not create barriers to appropriate diagnosis and treatment of psychiatric disorders, consistent with the responsibility of state medical boards to protect the public health.
(Res. 925, I-09)

D-275.974, Depression and Physician Licensure
Our AMA will (1) recommend that physicians who have major depression and seek treatment not have their medical licenses and credentials routinely challenged but instead have decisions about their licensure and credentialing and recredentialing be based on professional performance; and (2) make this resolution known to the various state medical licensing boards and to hospitals and health plans involved in physician credentialing and recredentialing.
(Res. 319, A-05 Reaffirmed: BOT action in response to referred for decision Res. 403, A-12)

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JOINT REPORT 1 OF THE COUNCIL ON MEDICAL EDUCATION AND COUNCIL ON SCIENCE AND PUBLIC HEALTH (A-19)
Protecting Medical Trainees from Hazardous Exposure (Resolution 301-A-18)
(Reference Committee C)

EXECUTIVE SUMMARY

Resolution 301-A-18, "Protecting Medical Trainees from Hazardous Exposure," introduced by the Illinois Delegation, asked that our American Medical Association (AMA): 1) call for the mandatory education of students, residents, physicians and surgeons on the deleterious effects of exposure to hazardous materials; 2) encourage the Accreditation Council for Graduate Medical Education and Liaison Committee on Medical Education to create standards that allow students and trainees to voluntarily avoid exposure to hazardous/biohazard materials without negatively impacting their standing in school or training programs; 3) support and encourage the specific option for students or trainees to be able to excuse themselves from exposure to methyl methacrylate if they are or think they may be pregnant without negatively impacting their standing in their school or training programs; and 4) support and encourage constant updating of the protection of medical trainees, physicians and surgeons from exposure to hazardous materials during the course of their medical school training and practice, using standards published by the Occupational Safety and Health Administration; the National Institute for Occupational Safety and Health and other Centers for Disease Control and Prevention agencies; the College of American Pathologists; and the American College of Radiology, as well as other relevant resources available for health workers.

Due to the complexity of the issues surrounding this topic, the resolution was referred.

This report:

- Provides legal definitions of hazardous chemicals, health hazards and physical hazards, and describes occupational exposure limits;
- Summarizes expected hazardous agent exposure in health care;
- Describes accreditation standards for medical school and residency/fellowship training regarding exposure to hazardous agents; and
- Discusses the need for learners' confidence in hazardous agent protection as well as greater clarity on hazardous agent avoidance.

The report recommends revising AMA Policy H-295.939, "OSHA Regulations for Students," to include residents and fellows. In addition, the report recommends new policy that: 1) encourages the Accreditation Council for Graduate Medical Education to require education on and demonstration of competence regarding potential exposure to hazardous agents relevant to specific specialties; 2) recommends medical schools include in their policies on hazardous exposure options for students to reduce exposure that will not negatively affect their ability to progress in their education; and 3) encourages medical schools and institutions with medical learners to vigilantly update educational material and protective measures on hazardous agent exposure, and make this information readily accessible.

JOINT REPORT OF THE COUNCIL ON MEDICAL EDUCATION AND THE COUNCIL ON SCIENCE AND PUBLIC HEALTH

CME/CSAPH Joint Report 1-A-19

Subject:	Protecting Medical Trainees from Hazardous Exposure (Resolution 301-A-18)
Presented by:	Carol Berkowitz, MD, Chair, Council on Medical Education Robyn F. Chatman, MD, MPH, Chair, Council on Science and Public Health
Referred to:	Reference Committee C (Nicole Riddle, MD, Chair)

Resolution 301-A-18, "Protecting Medical Trainees from Hazardous Exposure," introduced by the Illinois Delegation and referred by the American Medical Association (AMA) House of Delegates (HOD), asks the AMA to:

1) call for the mandatory education of students, residents, physicians and surgeons on the deleterious effects of exposure to hazardous materials;

2) encourage the Accreditation Council for Graduate Medical Education and Liaison Committee on Medical Education to create standards that allow students and trainees to voluntarily avoid exposure to hazardous/biohazard materials without negatively impacting their standing in school or training programs;

3) support and encourage the specific option for students or trainees to be able to excuse themselves from exposure to methyl methacrylate if they are or think they may be pregnant without negatively impacting their standing in their school or training programs; and

4) support and encourage constant updating of the protection of medical trainees, physicians and surgeons from exposure to hazardous materials during the course of their medical school training and practice, using standards published by the Occupational Safety and Health Administration; the National Institute for Occupational Safety and Health and other Centers for Disease Control and Prevention agencies; the College of American Pathologists; and the American College of Radiology, as well as other relevant resources available for health workers.

Testimony during the meeting before Reference Committee C and the HOD on this complex issue reflected strong support for the importance of protecting students/trainees and colleagues from exposure to hazardous materials. In addition, it was noted that taking measures of self-protection should not negatively impact one's standing in a training program or workplace. Other testimony encouraged a more expansive proposed policy, to include all physicians and surgeons, and to incorporate hazardous materials more generally. That said, determining which substances would be allowed, and the acceptable level of risk for those substances, pointed out the complexity of the issue, and the need for referral.

This report: 1) provides legal definitions of hazardous chemicals, health hazards and physical hazards, and describes occupational exposure limits; 2) summarizes expected hazardous agent exposure in health care; 3) summarizes health system processes addressing hazardous materials and exposure; 4) describes accreditation standards for medical school and residency/fellowship training regarding exposure to hazardous agents; and 5) concludes with a discussion that emphasizes the need for learners' confidence in hazardous agent protection as well as greater clarity on hazardous agent avoidance.

BACKGROUND

The Occupational Safety and Health (OSH) Act of 1970 was enacted "to assure safe and healthful working conditions for working men and women; by authorizing enforcement of the standards developed under the Act; by assisting and encouraging the States in their efforts to assure safe and healthful working conditions; by providing for research, information, education, and training in the field of occupational safety and health; and for other purposes."[1]

With the OSH Act of 1970, Congress created the Occupational Safety and Health Administration (OSHA) as part of the United States Department of Labor and established the National Institute for Occupational Safety and Health (NIOSH), a part of the Centers for Disease Control and Prevention (CDC). OSHA assures safe and healthful working conditions by setting and enforcing standards and by providing training, outreach, education and assistance. NIOSH researches and publishes worker safety recommendations which contain the latest U.S. Public Health Service guidelines.

Definition of Hazardous Chemicals

OSHA's Hazard Communication Standard (HAZCOM), 29 CFR 1910.1200, was adopted in 1983, expanded in scope in 1987, and aligned with the United Nations' Globally Harmonized System of Classification and Labeling of Chemicals (GHS) in 2012.[2] The purpose of HAZCOM is to ensure that the hazards of all chemicals produced or imported are classified, and that information concerning the classified hazards is transmitted to employers and employees. The transmittal of information is to be accomplished by means of comprehensive hazard communication programs, which are to include container labeling and other forms of warning, safety data sheets, and employee training.

HAZCOM defines a "hazardous chemical" as "any chemical which is classified as a physical hazard or a health hazard, a simple asphyxiant, combustible dust, pyrophoric gas, or hazard not otherwise classified.[2] "A "health hazard" is defined as "a chemical which is classified as posing one of the following hazardous effects: acute toxicity (any route of exposure); skin corrosion or irritation; serious eye damage or eye irritation; respiratory or skin sensitization; germ cell mutagenicity; carcinogenicity; reproductive toxicity; specific target organ toxicity (single or repeated exposure); or aspiration hazard." A "physical hazard" is defined as "a chemical that is classified as posing one of the following hazardous effects: explosive; flammable (gases, aerosols, liquids, or solids); oxidizer (liquid, solid or gas); self-reactive; pyrophoric (liquid or solid); self-heating; organic peroxide; corrosive to metal; gas under pressure; or in contact with water emits flammable gas." HAZCOM addresses both physical hazards (e.g., flammability or reactivity) and health hazards (e.g., carcinogenicity or sensitization). For ease of language this report will use the term "hazardous agents" to refer all hazards covered by HAZCOM.

HAZCOM stipulates that employers shall provide employees with effective information and training on hazardous agents in their work area at the time of their initial assignment and whenever a new chemical hazard the employees have not previously been trained about is introduced into

their work area. Information and training may be designed to cover categories of hazards (e.g., flammability, carcinogenicity) or specific chemicals. Chemical-specific information must always be available through labels and safety data sheets.

Exposure Limits

An occupational exposure limit (OEL) is an upper limit on the acceptable concentration of a hazard in a workplace for a material or class of materials. Several different OELs exist in the United States and include:

- Permissible exposure limit (PEL), set by OSHA;
- PELs set by the California Division of Occupational Safety and Health (Cal/OSHA);
- Recommended exposure limit (REL), set by NIOSH; and
- Threshold Limit Value (TLV) and Biological Exposure Indices (BEIs), set by the American Conference of Governmental Industrial Hygienists (ACGIH).

The OSHA PEL is the legally enforceable limit in the United States for exposure of an employee to a chemical substance or physical agent, such as high-level noise.[3] Cal/OSHA has established an extensive list of PELs that are enforced in workplaces under its jurisdiction, no less protective than the OSH Act, and not enforceable in establishments outside of Cal/OSHA's jurisdiction. However, of all states that have OSHA-approved State Plans, California has the most extensive list of OELs, which can provide information on acceptable levels of chemicals in the workplace for other states and organizations.

The NIOSH REL is a non-mandatory, recommended occupational chemical exposure limit.[4] NIOSH RELs are authoritative federal agency recommendations established according to the legislative mandate for NIOSH to recommend standards to OSHA. RELs are intended to limit exposure to hazardous agents in workplaces. In developing RELs and other recommendations to protect worker health, NIOSH evaluates all available medical, biological, engineering, chemical, and trade information relevant to the hazard.

ACGIH is a 501(c)(3) charitable scientific organization that advances occupational and environmental health. TLVs are airborne concentrations of chemical substances and represent conditions under which it is believed that nearly all workers may be repeatedly exposed without adverse effects. BEIs are guidance values for assessing biological monitoring of concentrations of chemicals in biological matrices. ACGIH TLVs and BEIs are health-based values and are not intended to be used as legal standards without an analysis of other factors necessary to make appropriate risk management decisions. The ACGIH TLVs are widely recognized as authoritative and are required to be included on safety data sheets by HAZCOM.

OSHA recognizes that many of its PELs are outdated and reflect inadequate measures of worker safety. Both OSHA and NIOSH recommend that employers take actions to keep worker exposures below the NIOSH REL. NIOSH provides a Pocket Guide to Chemical Hazards (NPG) that gives general industrial hygiene information for hundreds of chemicals/classes and presents key data for chemicals or substance groupings that are found in workplaces.[4] The OSHA PEL Tables include a side-by-side comparison of OSHA PELs, Cal/OSHA PELs, NIOSH RELs and ACGIH TLVs.[3] Additionally, OSHA provides general information regarding training requirements for employers and offers resources for use such as publications and videos.[5]

Health Care-specific Information

The OSHA PEL Tables contain many chemicals prevalent in health care settings including, but not limited to, methyl methacrylate, ethylene oxide, and formaldehyde/formalin.[3] Recognizing that many hazardous chemicals and medications are present in health care settings and may pose an exposure risk for health care workers, patients, and others, NIOSH has developed a list of antineoplastic and other hazardous drugs specific to health care.[6] OSHA provides access to a "Hospital eTool" that focuses on some hazards and controls found in the health care setting and describes standard requirements and recommended safe work practices for employee safety and health.[7] NIOSH also provides resources regarding reproductive health and the workplace for men and women and outlines the risks from some specific, and health care setting-related, chemicals.[8]

Medical specialty societies have provided additional information and resources regarding safety in the health care setting. The American College of Radiology, with the American Association of Physicists in Medicine, publishes a manual detailing radiation safety officer resources. This guide provides models and educational materials for medical imaging facilities, including personnel monitoring, that cover pregnancy and breastmilk concerns.[9] The American Academy of Orthopaedic Surgeons (AAOS) published a document outlining risks and precautions for pregnant orthopaedic surgeons in the workplace. The document provides information on a variety of risks encountered in an operating room including anesthetic gases, radiation, and methyl methacrylate.[10]

The evidence base used by experts to evaluate hazardous agents is updated when new research emerges and new methods of risk avoidance or mitigation are developed. For example, the AAOS and others agree that although methyl methacrylate has historically been thought to be teratogenic, current research and evidence show that fumes have no effect on pregnant rodents and were not transmitted to the serum or breastmilk of breastfeeding surgeons.[11,12] Authors note that the greatest risk of exposure is during the mixing process; this risk can be reduced by using vacuum-mixing and extraction hoods.

HEALTH SYSTEM PROCESSES ADDRESSING HAZARDOUS MATERIALS AND EXPOSURE

Hospitals are required by The Joint Commission to manage risk, coordinate risk reduction activities in the physical environment, collect deficiency information, and disseminate summaries of actions and results; most do this by establishing safety committees. Safety committee response plans should include policies and procedures that address exposures and require all-employee education about material safety. Employed physicians are required to complete such education (usually computer-based learning modules). Safety committees address the full range of hazardous materials, including cleaning materials, laboratory reagents, medical gases, contrast materials, and nuclear medicine products. Members of the medical staff who are not employees, and trainees who rotate through an institution for educational purposes, may not be required to complete such educational modules and may not know about Material Safety Data Sets (MSDSs) that the hospital has catalogued and how to respond to hazardous exposures.

STANDARDS REGARDING HAZARDOUS EXPOSURE IN EDUCATIONAL SETTINGS

Although the discussion concerning hazardous exposure during the 2018 Annual Meeting suggested broadening hazardous agent exposure recommendations to include physicians in practice, those physicians are protected against hazardous agent exposure by OSHA workplace safety regulations, as outlined above, even if they are not specifically trained about the regulations or safety procedures. Less certain are the protections afforded learners in health care settings;

therefore, this report will concentrate on education about hazardous agent exposure and standards and regulations regarding prevention of exposure (including voluntary avoidance) for medical students, residents, and fellows. Our AMA recognizes that this issue also extends to non-physician health professions students and trainees.

Medical School Accreditation Standards Regarding Hazardous Exposure

The Liaison Committee on Medical Education (LCME) accredits allopathic medical education programs leading to the MD degree in the United States. Requirements regarding medical student exposure to hazards are addressed in Standard 12: Medical Student Health Services, Personal Counseling, and Financial Aid Services, which includes 12.8:[13]

> A medical school has policies in place that effectively address medical student exposure to infectious and environmental hazards, including the following:
> - The education of medical students about methods of prevention
> - The procedures for care and treatment after exposure, including a definition of financial responsibility
> - The effects of infectious and environmental disease or disability on medical student learning activities
>
> All registered medical students (including visiting students) are informed of these policies before undertaking any educational activities that would place them at risk.

In assessing compliance with Standard 12.8, the LCME survey team during the site visit (typically occurring every 8 years) will ask the school to provide the following information:[14]

1. Does the medical school have policies related to infectious and environmental hazards? Do the policies explicitly address the education of students about preventing exposure; the procedures for treatment after exposure, including financial responsibility for treatment and follow-up; and the implications of infectious and/or environmental disease or disability on medical student participation in educational activities?

2. Describe how and when in the curriculum medical students are instructed about preventing exposure to infectious diseases and about protocols for treatment and follow-up in the case of an occupational exposure.

3. Describe how visiting medical students are informed about the procedures to be followed in the event of an occupational exposure.

4. Is there evidence that students are familiar with the policies and procedures to follow in the event of an environmental exposure?

The American Osteopathic Association's Commission on Osteopathic College Accreditation (COCA) accredits osteopathic medical education programs leading to the DO degree in the U.S. Element 5.3 addresses health and safety issues in colleges of osteopathic medicine (COM):[15]

> Element 5.3: Safety, Health, and Wellness: A COM must publish and follow policies and procedures that effectively mitigate faculty, staff, and student exposure to infectious and environmental hazards, provide education on prevention of such exposures, and address procedures for care and treatment after such exposures. A COM must also publish and follow policies related to student, faculty, and staff mental health and wellness and fatigue mitigation.

During the continuing accreditation process COCA requires evidence that its elements of accreditation are met. Evidentiary Submission 5.3 requires the COM to:

1. Provide the policies and procedures addressing safety and health issues.
2. Provide a link to where the documents are published.
3. Demonstrate how this information is provided to students.

Policies regarding hazardous exposure and education and training regarding prevention and avoidance are often available on medical school, health science center, or university websites. Examples are included in the Appendix.

Residency/Fellowship Program Accreditation Standards Regarding Hazardous Exposure

The Accreditation Council for Graduate Medical Education (ACGME) accredits residency and fellowship programs and sets requirements for training programs as well as the institutions in which training occurs.

A review of ACGME institutional requirements[16] reveals general recommendations regarding safety of trainees as well as patients. As part of the learning and working environment, the sponsoring institution must ensure trainees have "access to systems for reporting errors, adverse events, unsafe conditions, and near misses in a protected manner that is free from reprisal" (III.B.1.a) and provide a healthy, safe and educational environment that provides for "safety and security measures for residents/fellows appropriate to the participating site" (III.B.7.d.(2))

The ACGME's Common Program Requirements (CPRs) include more specificity. The CPRs currently in effect include responsibilities of the program and its sponsoring institution to address resident well-being in several ways, including evaluating workplace safety data and addressing the safety of residents and faculty members (VI.C.1.c).[17] Program requirements that go into effect in July 2019 provide more detail. The program, with its sponsoring institution, must ensure healthy and safe learning and working environments that, among other things, provide "security and safety measures appropriate to the participating site." (I.D.2.d).[18] Concerning well-being, the revised CPRs provide background for VI.C.1.c:

> This requirement emphasizes the responsibility shared by the Sponsoring Institution and its programs to gather information and utilize systems that monitor and enhance resident and faculty member safety, including physical safety. Issues to be addressed include, but are not limited to, monitoring of workplace injuries, physical or emotional violence, vehicle collisions, and emotional well-being after adverse events.[18]

A review of specific program requirements for specialties that may have increased exposure to hazardous agents revealed minimal discussion of hazardous agent exposures. Program requirements for radiology, vascular surgery, neurosurgery, orthopaedic surgery, cardiology, and endovascular surgical neuroradiology were reviewed.

Program requirements for neurosurgery, vascular surgery, cardiology, and orthopaedic surgery did not include any mention of exposure to hazardous agents. Requirements for endovascular surgical neuroradiology[19] stated that fellow eligibility for entry to the program include "a course in basic radiographic skills, including radiation physics, radiation biology, and radiation protection; and the pharmacology of radiographic contrast materials acceptable to the program director where the neuroradiology training will occur." (III.A.6.b.(1)). Not noted are the adverse effects of radiation exposure as a component of the medical knowledge that fellows are required to know.

Program requirements for radiology were the most extensive regarding hazardous agent exposure.[20] Didactic curriculum is to include a minimum of 80 hours of classroom and laboratory training in basic radionuclide handling techniques applicable to the medical use of unsealed byproduct material for imaging and localization studies (10 CFR 35.290)[21] and oral administration of sodium iodide I-131 for procedures requiring a written directive (10 CFR 35.392, 10 CFR 35.394). [IV.A.3.e.(5)]. These specific requirements are not those of ACGME or any health care accreditation agency but of the federal Nuclear Regulatory Commission; they appear in the Code of Federal Regulations.

Furthermore, residents in radiology programs must demonstrate competence in the ongoing awareness of radiation exposure, protection, and safety, and the application of these principles in practice [IV.A.5.a).(2).(e)]. And, finally, residents must have a minimum of 700 hours of training and work experience under the supervision of an authorized user (AU) in basic radionuclide handling techniques and radiation safety applicable to the medical use of unsealed byproduct material for imaging and localization studies (10 CFR 35.290) and oral administration of sodium iodide I-131 for procedures requiring a written directive (10 CFR 35.392, 10 CFR 35.394) [IV.A.6.f)]. Operational and quality control procedures should include ensuring radiation protection in practice, to include dosimeters, exposure limits, and signage [IV.A.6.f).(1)].[21]

Reducing Hazardous Exposure in Educational Settings

Medical school accreditation standards do not specifically address avoiding exposure to hazards that may be endemic to the educational environment. For example, what could a student expect if the student refuses a particular component of a rotation that puts him or her in proximity with a hazardous agent, in terms of completing the rotation? One college of osteopathic medicine catalog proactively addressed this issue by asking students to decide if they are comfortable with required levels of exposure prior to matriculation:

> Working and studying in these special environments may require the student to make an informed decision concerning continued participation because failure to participate in required classes could result in dismissal. Examples may include but are not limited to: students who believe they are allergic or sensitive to certain chemicals, students who are pregnant and are concerned about potential hazards to a developing fetus, or students who believe they are immuno-compromised or have increased susceptibility to disease. The student must decide upon their ability to participate prior to beginning school.[22]

Medical school deans of student affairs should be prepared to handle such requests and provide guidance to a student concerned about avoiding hazardous agent exposure. The type of counsel and outcomes will vary by the situation.

ACGME institutional and program requirements more generally address resident/fellow absences because of personal health or family circumstances, rather than an absence resulting from concerns about hazardous agent exposure. The CPRs note:

> VI.C.2. There are circumstances in which residents may be unable to attend work, including but not limited to fatigue, illness, family emergencies, and parental leave. Each program must allow an appropriate length of absence for residents unable to perform their patient care responsibilities. VI.C.2.a) The program must have policies and procedures in place to ensure coverage of patient care. VI.C.2.b) These policies must be implemented without fear of negative consequences for the resident who is or was unable to provide the clinical work.[18]

In addition, programs are to counsel residents that they may have to extend their length of training depending on the length of absence and specialty board eligibility requirements, and that teammates should assist colleagues in need and equitably reintegrate them upon return. Program requirements do not address the issue of avoidance of exposure to hazardous agents, and, as in medical schools, the subject is likely to be managed on a case-by-case basis.

COMMUNICATION ON HAZARDOUS CHEMICAL AGENT EXPOSURE FOR TRAINEES

A significant number of informational resources and standards are available—including OSHA requirements, OSHA's Hazard Communication Standard, NIOSH recommendations, and 22 state-level OHSA plans (which may be more stringent than federal requirements)—to outline the requirements for a safe environment for institutions with students and with residents and fellows (as employees). Furthermore, educational accreditation requirements mandate policies for both maintaining a safe learning environment and for educating trainees on workplace safety. In addition, specialty societies produce material on current safety measures for exposure to materials relevant to the specialty. Assuring that all information and material is kept current, and new information on hazardous agents is added when available, is essential to allow medical trainees the confidence to learn and work safely in the health care environment.

RELEVANT AMA POLICY

Existing AMA policy related to hazardous exposure during training is limited. Policy H-295.939, "OSHA Regulations for Students," encourages all health care-related educational institutions to apply existing Occupational Safety and Health Administration Blood Borne Pathogen Standards equally to employees and students. Policy D-135.987, "Modern Chemicals Policies," calls on the United States government to implement a comprehensive chemicals policy that is in line with current scientific knowledge on human and environmental health, and that requires a full evaluation of the health impacts of both newly developed and industrial chemicals now in use and encourages the training of medical students, physicians, and other health professionals about the human health effects of toxic chemical exposures.

SUMMARY AND RECOMMENDATIONS

It is recognized that the risk of hazardous agent exposure exists in the health care setting and that additional considerations, including reproductive health, may represent another level of risk. Exposure levels for hazardous agents for employees in a medical setting, including residents and fellows, are regulated by OSHA after all available medical, biological, engineering, chemical, and trade information relevant to the hazard are thoroughly researched and evaluated by NIOSH and others. Exposure levels for hazardous chemicals for medical students are dictated by the student's educational institution and often are the same as OSHA standards.

There are standard employee education processes on the topics of hazardous materials, how to locate MSDSs, minimizing risks of exposure, and proper responses to employee exposure. Such education is required of all employees of hospitals and health systems, including physicians. To make such educational modules available to students and trainees, and to require medical students, residents, and fellows to complete such educational modules (as do faculty, who are institutional employees), would not be a complex task. It would also seem feasible to require and monitor the completion of such education modules as a condition of program accreditation for a school of allopathic or osteopathic medicine or a residency or fellowship program.

Although the policies regarding hazardous agent exposure, education, and training vary depending on the medical school or residency program, accreditation standards require a healthy, safe and educational environment for medical students, residents, and fellows. It benefits educational and health care institutions to ensure that medical trainees are knowledgeable about hazards and confident that voluntary avoidance is possible, albeit with potential setbacks in educational and training progress. All learners should feel confident that the institutions in which they receive their education are attentive to the latest research and protective measures for their health and safety. The Council on Medical Education and the Council on Science and Public Health therefore recommend that the following recommendations be adopted in lieu of Resolution 301-A-18 and the remainder of the report be filed:

1. That our American Medical Association (AMA) amend Policy H-295.939, "OSHA Regulations for Students," by addition and deletion, to read as follows:

   H-295.939, "~~OSHA Regulations for Students~~ Protecting Medical Trainees from Hazardous Exposure"
   Our AMA will ~~The AMA, working in conjunction with its Medical School Section, to~~ encourage~~s~~ all health care-related educational institutions to apply the ~~existing~~ Occupational Safety and Health Administration (OSHA) Blood Borne Pathogen ~~S~~standard~~s~~ and OSHA hazardous exposure regulations, including communication requirements, equally to employees, students, and residents/fellows~~students~~. (Modify Current HOD Policy)

2. That our AMA recommend that the Accreditation Council for Graduate Medical Education revise the common program requirements to require education and subsequent demonstration of competence regarding potential exposure to hazardous agents relevant to specific specialties, including but not limited to: appropriate handling of hazardous agents, potential risks of exposure to hazardous agents, situational avoidance of hazardous agents, and appropriate responses when exposure to hazardous material may have occurred in the workplace/training site. (New HOD Policy)

3. That our AMA recommend a) that medical school policies on hazardous exposure include options to limit hazardous agent exposure in a manner that does not impact students' ability to successfully complete their training, and b) that medical school policies on continuity of educational requirements toward degree completion address leaves of absence or temporary reassignments when a pregnant trainee wishes to minimize the risks of hazardous exposures that may affect her personal health status. (New HOD Policy)

4. That our AMA recommend that medical schools and health care settings with medical learners be vigilant in updating educational material and protective measures regarding hazardous agent exposure of its learners and make this information readily available to students, faculty, and staff. (New HOD Policy)

5. That our AMA recommend that medical schools and other sponsors of health professions education programs ensure that their students and trainees meet the same requirements for education regarding hazardous materials and potential exposures as faculty and staff. (New HOD Policy)

Fiscal Note: $500.

APPENDIX: EXAMPLES OF SCHOOL POLICY REGARDING HAZARDOUS EXPOSURE

Elson S Floyd College of Medicine, Washington State University

Policy Title: Medical Student Training on Universal Precautions and Biohazards

1.0 Policy Statement:
It is the Elson S. Floyd College of Medicine (ESFCOM) policy that all medical students, enrolled and visiting, learn precautions and infection control measures for pathogens and environmental hazards prior to patient contact and throughout matriculation.

4.0 Procedures
Ultimately, each student shares responsibility for his/her health and safety in the clinical/educational setting. Training begins with universal precautions prior to and during orientation and continues throughout foundational and clinical learning experiences.
Key policies and procedures, as well as locations of relevant information, will be provided during the student onboarding process.

Visiting medical students, prior to participation in ESFCOM sponsored clinical activities, will need to provide proof of appropriate universal precautions and post exposure care training. Verification of awareness of the ESFCOM online policies and protocols regarding Universal Precautions and Biohazards is required.

University of Texas Rio Grande Valley School of Medicine

The SOM will communicate with the university's Environmental Health, Safety, and Risk Management office (http://www.utrgv.edu/ehsrm) to promote a healthy and safe campus environment. This office oversees hazard communication, Occupational Safety and Health Administration compliance, indoor air quality, bloodborne pathogens, asbestos awareness, construction safety, accident investigation/reporting, ergonomics, and industrial hygiene.

The University of Colorado School of Medicine

Education and Training: Annually, all medical students are required to complete online modules entitled Hazardous Materials and Bloodborne Pathogens. The Hazardous Materials module includes: identification of workplace hazardous, use of personal protective equipment and response to a hazardous exposure. The Bloodborne Pathogens module provides instruction about: risks of bloodborne pathogens to health care workers, safeguards against bloodborne pathogen exposure, and how to manage exposures. Students must complete these modules annually. Students are not able to begin or continue clinical activities until satisfactory completion of the modules. Students have ongoing access to course material through online platform.

The University of California Irvine School of Medicine

Occupational Risk Training and Prevention

Participation in direct patient care activities can pose risks to health care professionals, particularly in terms of exposure to infectious diseases. The School of Medicine requires that all medical students participate in annual safety training that facilitates students' anticipation, recognition, and avoidance of potential occupational risks. The School of Medicine also provides practical training in safe practices so that students minimize risk in potentially hazardous situations, such as the

Anatomy lab and the operating room. A particular emphasis is placed on strict adherence to universal precautions. Finally, students are required to show proof of immunity to a series of vaccine-preventable diseases as outlined in the AAMC Standardized Immunization Form.

…Students receive training on occupational and environmental hazards as part of their orientation to the school. Students are required to complete an annual online safety training, which reinforces this information.

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AMERICAN MEDICAL ASSOCIATION HOUSE OF DELEGATES

Resolution: 301
(A-19)

Introduced by: Virginia, American Association of Clinical Urologists, Louisiana, Mississippi

Subject: American Board of Medical Specialties Advertising

Referred to: Reference Committee C
(Nicole Riddle, MD, Chair)

Whereas, The American Board of Medical Specialties (ABMS) has an advertising campaign to the general public directing patients to ABMS board certified physicians; and

Whereas, Fees for board certification, recertification, and maintenance of certification amount to thousands of dollars paid by physicians during their professional career in order to practice medicine; and

Whereas, This advertising campaign benefits mainly the ABMS and their component boards; therefore be it

RESOLVED, That our American Medical Association oppose the use of any physician fees, dues, etc., for any advertising by the American Board of Medical Specialties or any of their component boards to the general public. (New HOD Policy)

Fiscal Note: Minimal - less than $1,000.

Received: 02/01/19

AMERICAN MEDICAL ASSOCIATION HOUSE OF DELEGATES

Resolution: 302
(A-19)

Introduced by: American Association of Public Health Physicians

Subject: The Climate Change Lecture for US Medical Schools

Referred to: Reference Committee C
(Nicole Riddle, MD, Chair)

Whereas, AMA policy recognizes the grave and urgent risks to human health posed by global climate change and "supports educating the medical community on the potential adverse public health effects of global climate change and incorporating the health implications of climate change into the spectrum of medical education" (AMA Policy H-135.938); and

Whereas, Experts have stated that, "climate change and health education should be rapidly integrated into U.S. health professional curricula and continuing medical education" but medical schools have been slow to proceed because there is not a broad consensus as to what information to include, how to add this to the curriculum, and what information might be displaced if climate change were added[1]; and

Whereas, The Global Consortium on Climate and Health Education published in March 2018 the paper "Climate and Health Core Competencies", an institutional guide to climate change educational content for medical schools, which supports adding topics of climate change into medical school curricula[2]; and

Whereas, The AMA is uniquely positioned to influence accreditation bodies and medical schools to introduce quickly a minimum standard of climate change education for all medical students; therefore be it

RESOLVED, That our American Medical Association recommend that one hour of teaching on climate change, "The Climate Change Lecture", be required for all medical students before graduation with the M.D. or D.O. degree as a minimum standard, with more than one hour of teaching encouraged for medical schools that so choose (Directive to Take Action); and be it further

RESOLVED, That our AMA recommend that the goals of "The Climate Change Lecture" be for medical students upon graduation to have a basic knowledge of the science of climate change, to be able to describe the risks that climate change poses to human health, and be prepared to advise patients how to protect themselves from the health risks posed by climate change (Directive to Take Action); and be it further

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RESOLVED, That our AMA recommend that medical schools be exempted from the requirement of "The Climate Change Lecture" that have already implemented pedagogy on this topic that amounts to an hour or more of required learning on climate change and health for medical students (Directive to Take Action); and be it further

RESOLVED, That our AMA prepare a prototype PowerPoint slide presentation and lecture notes for "The Climate Change Lecture", which could be used by medical schools, or schools may create their own lecture, video or online course to fulfill the requirements of "The Climate Change Lecture" (Directive to Take Action); and be it further

RESOLVED, That our AMA write to the Commission on Osteopathic College Accreditation (COCA) which is the accrediting organization for schools offering the D.O. degree in the United States; to the Liaison Committee on Medical Education (LCME), which is the accrediting organization for schools offering the M.D. degree in the United States (including for the Uniformed Services University of the Health Sciences); and to the LCME representative from the AMA Medical Student Section, to recommend that "The Climate Change Lecture", using AMA's prototype PowerPoint presentation and notes, or other formats, become a requirement for all M.D. and D.O. degrees for United States medical schools beginning with 2021 graduates (Directive to Take Action); and be it further

RESOLVED, That our AMA delegation to the World Medical Association present a similar resolution to the World Medical Association recommending the concept of the "The Climate Change Lecture" for medical schools worldwide. (Directive to Take Action)

Fiscal Note: Estimated cost to implement this resolution is $50,000.

Received: 04/30/19

Other Resources:

"My Patients' Health Depends on Addressing Climate Change" By Autumn Vogel (4th Year medical school student Penn State Med School) February 6, 2019 https://otherwords.org/im-a-future-physician-my-patients-health-depends-on-addressing-climate-change/ Accessed February 17, 2019.

"Preparing Medical Students for a Warmer World" By Christian Cayon (medical student at Mt. Sinai School of Medicine) January 03, 2019 https://www.truthdig.com/articles/the-looming-health-crisis-we-arent-preparing-for/ Accessed February 17, 2019.

RELEVANT AMA POLICY

Global Climate Change and Human Health H-135.938
Our AMA:
1. Supports the findings of the Intergovernmental Panel on Climate Change's fourth assessment report and concurs with the scientific consensus that the Earth is undergoing adverse global climate change and that anthropogenic contributions are significant. These climate changes will create conditions that affect public health, with disproportionate impacts on vulnerable populations, including children, the elderly, and the poor.
2. Supports educating the medical community on the potential adverse public health effects of global climate change and incorporating the health implications of climate change into the spectrum of medical education, including topics such as population displacement, heat waves and drought, flooding, infectious and vector-borne diseases, and potable water supplies.
3. (a) Recognizes the importance of physician involvement in policymaking at the state, national, and global level and supports efforts to search for novel, comprehensive, and economically sensitive approaches to mitigating climate change to protect the health of the public; and (b) recognizes that whatever the etiology of global climate change, policymakers should work to reduce human contributions to such changes.
4. Encourages physicians to assist in educating patients and the public on environmentally sustainable practices, and to serve as role models for promoting environmental sustainability.
5. Encourages physicians to work with local and state health departments to strengthen the public health infrastructure to ensure that the global health effects of climate change can be anticipated and responded to more efficiently, and that the AMA's Center for Public Health Preparedness and Disaster Response assist in this effort.
6. Supports epidemiological, translational, clinical and basic science research necessary for evidence-based global climate change policy decisions related to health care and treatment.
Citation: (CSAPH Rep. 3, I-08; Reaffirmation A-14

AMERICAN MEDICAL ASSOCIATION HOUSE OF DELEGATES

Resolution: 303
(A-19)

Introduced by: California

Subject: Graduate Medical Education and the Corporate Practice of Medicine

Referred to: Reference Committee C
(Nicole Riddle, MD, Chair)

Whereas, Many states have policies and laws intended to prevent unlicensed persons from interfering with or influencing a physician's professional judgment; and

Whereas, At least 38 states have laws that prohibit lay entities from owning or operating medical practices; and

Whereas, The education of residents and fellows is a matter of the highest importance and the foundation of medical education in the United States; and

Whereas, The environment for education of residents and fellows must be free of the conflict of interest created between corporate-owned lay entities' fiduciary responsibility to shareholders and the educational mission of residency or fellowship training programs; and

Whereas, A growing number of Emergency Medicine residency and fellowship training programs are operated by incorporated lay entities; and

Whereas, Corporate-owned lay entities who manage emergency departments and residency programs can be found nationwide with at least 14 programs currently in Florida, Georgia, Pennsylvania, Ohio, Michigan, West Virginia, Illinois, Nevada, Texas, and Oklahoma; and

Whereas, These same corporate-owned lay entities also sponsor a growing number of graduate medical education (GME) programs in other specialties including Internal Medicine and Anesthesiology; and

Whereas, The AMA currently has no policy relating to the ownership by corporate-owned lay entities of GME training programs; therefore be it

RESOLVED, That our American Medical Association recognize and support that the environment for education of residents and fellows must be free of the conflict of interest created between corporate-owned lay entities' fiduciary responsibility to shareholders and the educational mission of residency or fellowship training programs (New HOD Policy); and be it further

RESOLVED, That our AMA support that the Accreditation Council for Graduate Medical Education require that graduate medical education programs must be established in compliance with all state laws, including prohibitions on the corporate practice of medicine, as a condition of accreditation. (New HOD Policy)

Fiscal Note: Minimal - less than $1,000.
Received: 04/29/19

RELEVANT AMA POLICY

Accounting for GME Funding D-305.992
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.
Citation: (Sub. Res. 302, I-00; Reaffirmed: CME Rep. 2, A-10; Reaffirmation A-11

AMERICAN MEDICAL ASSOCIATION HOUSE OF DELEGATES

Resolution: 304
(A-19)

Introduced by: California

Subject: Tracking Outcomes and Supporting Best Practices of Health Care Career Pipeline Programs

Referred to: Reference Committee C
(Nicole Riddle, MD, Chair)

Whereas, In 2015, only 7% of California's graduating MDs and 4% of graduating DOs were Latino compared to 38% of the state's population, and 5% and 1% of graduating MD's and DO's were African-American, compared to 6% of the state's population (Toretsky); and

Whereas, Nationally, only 5% of southeast Asians are likely to apply to medical schools, even less than 8% of African American and 6% of Latino individuals; and

Whereas, According to the Office of Minority Health, health inequities experienced by minority communities are often exacerbated by the lack of underrepresented minorities working as professionals in health and biomedical science fields; and

Whereas, Lack of ethnic diversity among the nation's physicians may exacerbate the existing physician shortage for underserved communities as ethnic minority physicians are more likely than their White counterparts to practice in those communities (Grumbach); and

Whereas, Intensive academic advising and one-on-one faculty mentoring are important components of pipeline programs that can meet and overcome structural, institutional, academic, and personal challenges (Kuo); and

Whereas, A diverse physician workforce will require the continuing attention of medical school leadership and health care systems and interventions to provide opportunities for diverse physicians to join the leadership ranks (Center); and

Whereas, AMA has supported pipeline programs and intervention programs designed to increase ethnic minority physicians in medically underserved areas; and

Whereas, To date, there has been no comprehensive database tracking health pipeline program participants and the achievement of their desired goals; and

Whereas, What limited data that does exist shows health and biomedical science pipeline programs desire the ability to recognize, promote and share best practices and seek more centralized communication between programs; therefore be it

RESOLVED, That our American Medical Association support the publication of a white paper chronicling health care career pipeline programs across the nation aimed at increasing the number programs and promoting leadership development of underrepresented minority health care professionals in medicine and the biomedical sciences, with a focus on assisting such programs by identifying best practices and tracking participant outcomes (Directive to Take Action); and be it further

RESOLVED, That our AMA work with various stakeholders, including medical and allied health professional societies, established biomedical science pipeline programs and other appropriate entities, to establish best practices for the sustainability and success of health care career pipeline programs. (Directive to Take Action)

Fiscal Note: Modest - between $1,000 - $5,000.

Received: 04/29/19

RELEVANT AMA POLICY

Strategies for Enhancing Diversity in the Physician Workforce D-200.985
1. Our AMA, independently and in collaboration with other groups such as the Association of American Medical Colleges (AAMC), will actively work and advocate for funding at the federal and state levels and in the private sector to support the following: a. Pipeline programs to prepare and motivate members of underrepresented groups to enter medical school; b. Diversity or minority affairs offices at medical schools; c. Financial aid programs for students from groups that are underrepresented in medicine; and d. Financial support programs to recruit and develop faculty members from underrepresented groups.
2. Our AMA will work to obtain full restoration and protection of federal Title VII funding, and similar state funding programs, for the Centers of Excellence Program, Health Careers Opportunity Program, Area Health Education Centers, and other programs that support physician training, recruitment, and retention in geographically-underserved areas.
3. Our AMA will take a leadership role in efforts to enhance diversity in the physician workforce, including engaging in broad-based efforts that involve partners within and beyond the medical profession and medical education community.
4. Our AMA will encourage the Liaison Committee on Medical Education to assure that medical schools demonstrate compliance with its requirements for a diverse student body and faculty.
5. Our AMA will develop an internal education program for its members on the issues and possibilities involved in creating a diverse physician population.
6. Our AMA will provide on-line educational materials for its membership that address diversity issues in patient care including, but not limited to, culture, religion, race and ethnicity.
7. Our AMA will create and support programs that introduce elementary through high school students, especially those from groups that are underrepresented in medicine (URM), to healthcare careers.
8. Our AMA will create and support pipeline programs and encourage support services for URM college students that will support them as they move through college, medical school and residency programs.
9. Our AMA will recommend that medical school admissions committees use holistic assessments of admission applicants that take into account the diversity of preparation and the variety of talents that applicants bring to their education.
10. Our AMA will advocate for the tracking and reporting to interested stakeholders of demographic information pertaining to URM status collected from Electronic Residency Application Service (ERAS) applications through the National Resident Matching Program (NRMP).
11. Our AMA will continue the research, advocacy, collaborative partnerships and other work that was initiated by the Commission to End Health Care Disparities.
12. Our AMA opposes legislation that would undermine institutions' ability to properly employ affirmative action to promote a diverse student population.
Citation: CME Rep. 1, I-06; Reaffirmation I-10; Reaffirmation A-13; Modified: CCB/CLRPD Rep. 2, A-14; Reaffirmation: A-16; Appended: Res. 313, A-17; Appended: Res. 314, A-17; Modified: CME Rep. 01, A-18; Appended: Res. 207, I-18

AMERICAN MEDICAL ASSOCIATION HOUSE OF DELEGATES

Resolution: 305
(A-19)

Introduced by: Illinois

Subject: Lack of Support for Maintenance of Certification

Referred to: Reference Committee C
(Nicole Riddle, MD, Chair)

Whereas, The American Board of Medical Specialties (ABMS) has responded to a groundswell of criticism focused on the requirements for maintenance of certification (MOC) by creating an independent "Vision Commission" designed to "reimagine a system of continuing certification"; and

Whereas, The Vision Commission released its draft report December 11, 2018, with a public comment period that ended January 15, 2019; and

Whereas, The draft report was divided into "Findings" and "Recommendations," and some of the highlights include results of a survey conducted by the Vision Commission which showed that only 12% of 34,616 physicians surveyed valued the program; and

Whereas, Robust evidence does not exist correlating physicians' grades on secure, pass/fail MOC exams with patient outcomes; and

Whereas, Secure exam questions and assessments that rely exclusively on knowledge recall are not aligned with how diplomates practice and provide patient care; and

Whereas, The Vision Commission has documented significant harmful consequences of MOC, stating "The Commission heard compelling testimony from all stakeholders that loss of certification can lead to loss of employment or certain employment opportunities for diplomates or loss of reimbursement from insurance carriers"; and

Whereas, One of the promises in the Hippocratic Oath we take as physicians is "First, do no Harm" or "primum non nocere"; therefore be it

RESOLVED, That our American Medical Association urge all American Board of Medical Specialties (ABMS) Boards to phase out the use of mandated, periodic, pass/fail, point-in-time examinations, and Quality Improvement/Practice Improvement components of the Maintenance of Certification process, and replace them with more longitudinal and formative assessment strategies that provide feedback for continuous learning and improvement and support a physician's commitment to ongoing professional development (Directive to Take Action); and be it further

RESOLVED, That our AMA encourage all ABMS Boards to adopt and immediately begin the process of implementing the following recommendation from the Continuing Board Certification Vision For the Future Commission Final Report: “Continuing certification must change to incorporate longitudinal and other innovative formative assessment strategies that support learning, identify knowledge and skills gaps, and help diplomates stay current. The ABMS Boards must offer an alternative to burdensome highly-secure, point-in-time examinations of knowledge.” (Directive to Take Action)

Fiscal Note: Minimal - less than $1,000.

Received: 04/25/19

The topic of this resolution is currently under study by the Council on Medical Education.

AMERICAN MEDICAL ASSOCIATION HOUSE OF DELEGATES

Resolution: 306
(A-19)

Introduced by: Illinois

Subject: Interest Rates and Medical Education

Referred to: Reference Committee C
(Nicole Riddle, MD, Chair)

Whereas, The average medical student will graduate two hundred to three hundred thousand dollars in debt ("Medical Student Education," 2017; Bavier, 2016); and

Whereas, Almost 90% of Illinois medical students pay for medical education using federal grants (Smith et al., 2018); and

Whereas, The current interest rates for professional student loans from the federal government are 6.6 - 7.6% ("Interest Rates", 2018); and

Whereas, The median and mean 10-year US Treasury Rates are 3.85% and 4.56%, respectively ("10 Year Treasury Rate", 2018); and

Whereas, Interest can result itself in a large financial burden and discourage the entry of economically disadvantaged applicants (Fruen, 1983); and

Whereas, The federal government should invest in the education and training of healthcare providers, not profit from it; therefore be it

RESOLVED, That our American Medical Association reaffirm Policy H-305.925, "Principles of and Actions to Address Medical Education Costs and Student Debt." (Reaffirm HOD Policy)

Fiscal Note: Minimal - less than $1,000.

Received: 04/25/19

References:

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Fruen, Mary A. "Chapter 8: How The Medical Student Finances Educational Expenses." Medical Education and Societal Needs: a Planning Report for the Health Professions, by George Sternlieb, National Academies Press, 1983.

"Interest Rates for New Direct Loans." Federal Student Aid, 17 July 2018, studentaid.ed.gov/sa/about/announcements/interest-rate.

"Medical Student Education: Debt, Costs, and Loan Repayment Fact Card." AAMC, Oct. 2017.
https://members.aamc.org/iweb/upload/2017%20Debt%20Fact%20Card.pdf

Smith, J, Elahi, F, Bravo, A, et al. "2018 Medical Student Debt Survey." Report for Team Investigating Resolutions, December 2018.
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RELEVANT AMA POLICY

Principles of and Actions to Address Medical Education Costs and Student Debt H-305.925

The costs of medical education should never be a barrier to the pursuit of a career in medicine nor to the decision to practice in a given specialty. To help address this issue, our American Medical Association (AMA) will:

1. Collaborate with members of the Federation and the medical education community, and with other interested organizations, to address the cost of medical education and medical student debt through public- and private-sector advocacy.
2. Vigorously advocate for and support expansion of and adequate funding for federal scholarship and loan repayment programs—such as those from the National Health Service Corps, Indian Health Service, Armed Forces, and Department of Veterans Affairs, and for comparable programs from states and the private sector—to promote practice in underserved areas, the military, and academic medicine or clinical research.
3. Encourage the expansion of National Institutes of Health programs that provide loan repayment in exchange for a commitment to conduct targeted research.
4. Advocate for increased funding for the National Health Service Corps Loan Repayment Program to assure adequate funding of primary care within the National Health Service Corps, as well as to permit: (a) inclusion of all medical specialties in need, and (b) service in clinical settings that care for the underserved but are not necessarily located in health professions shortage areas.
5. Encourage the National Health Service Corps to have repayment policies that are consistent with other federal loan forgiveness programs, thereby decreasing the amount of loans in default and increasing the number of physicians practicing in underserved areas.
6. Work to reinstate the economic hardship deferment qualification criterion known as the “20/220 pathway,” and support alternate mechanisms that better address the financial needs of trainees with educational debt.
7. Advocate for federal legislation to support the creation of student loan savings accounts that allow for pre-tax dollars to be used to pay for student loans.
8. Work with other concerned organizations to advocate for legislation and regulation that would result in favorable terms and conditions for borrowing and for loan repayment, and would permit 100% tax deductibility of interest on student loans and elimination of taxes on aid from service-based programs.
9. Encourage the creation of private-sector financial aid programs with favorable interest rates or service obligations (such as community- or institution-based loan repayment programs or state medical society loan programs).
10. Support stable funding for medical education programs to limit excessive tuition increases, and collect and disseminate information on medical school programs that cap medical education debt, including the types of debt management education that are provided.
11. Work with state medical societies to advocate for the creation of either tuition caps or, if caps are not feasible, pre-defined tuition increases, so that medical students will be aware of their tuition and fee costs for the total period of their enrollment.
12. Encourage medical schools to (a) Study the costs and benefits associated with non-traditional instructional formats (such as online and distance learning, and combined baccalaureate/MD or DO programs) to determine if cost savings to medical schools and to medical students could be realized without jeopardizing the quality of medical education; (b) Engage in fundraising activities to increase the availability of scholarship support, with the support of the Federation, medical schools, and state and specialty medical societies, and develop or enhance financial aid opportunities for medical students, such as self-managed, low-interest loan programs; (c) Cooperate with postsecondary institutions to establish collaborative debt counseling for entering first-year medical students; (d) Allow for flexible scheduling for medical students who encounter financial difficulties that can be remedied only by employment, and consider creating opportunities for paid employment for medical students; (e) Counsel individual medical student borrowers on the status of their indebtedness and payment schedules prior to their graduation; (f) Inform students of all government loan opportunities and disclose the reasons that preferred lenders were chosen; (g) Ensure that all medical student fees are earmarked for specific and well-defined purposes, and avoid charging any overly broad and ill-defined fees, such as but not limited to professional fees; (h) Use their collective purchasing power to obtain discounts for their students on necessary medical equipment, textbooks, and other educational supplies; (i) Work to ensure stable funding, to eliminate the need for increases in tuition and fees to compensate for unanticipated decreases in other sources of revenue; mid-year and retroactive tuition increases should be opposed.

13. Support and encourage state medical societies to support further expansion of state loan repayment programs, particularly those that encompass physicians in non-primary care specialties.
14. Take an active advocacy role during reauthorization of the Higher Education Act and similar legislation, to achieve the following goals: (a) Eliminating the single holder rule; (b) Making the availability of loan deferment more flexible, including broadening the definition of economic hardship and expanding the period for loan deferment to include the entire length of residency and fellowship training; (c) Retaining the option of loan forbearance for residents ineligible for loan deferment; (d) Including, explicitly, dependent care expenses in the definition of the "cost of attendance"; (e) Including room and board expenses in the definition of tax-exempt scholarship income; (f) Continuing the federal Direct Loan Consolidation program, including the ability to "lock in" a fixed interest rate, and giving consideration to grace periods in renewals of federal loan programs; (g) Adding the ability to refinance Federal Consolidation Loans; (h) Eliminating the cap on the student loan interest deduction; (i) Increasing the income limits for taking the interest deduction; (j) Making permanent the education tax incentives that our AMA successfully lobbied for as part of Economic Growth and Tax Relief Reconciliation Act of 2001; (k) Ensuring that loan repayment programs do not place greater burdens upon married couples than for similarly situated couples who are cohabitating; (l) Increasing efforts to collect overdue debts from the present medical student loan programs in a manner that would not interfere with the provision of future loan funds to medical students.
15. Continue to work with state and county medical societies to advocate for adequate levels of medical school funding and to oppose legislative or regulatory provisions that would result in significant or unplanned tuition increases.
16. Continue to study medical education financing, so as to identify long-term strategies to mitigate the debt burden of medical students, and monitor the short-and long-term impact of the economic environment on the availability of institutional and external sources of financial aid for medical students, as well as on choice of specialty and practice location.
17. Collect and disseminate information on successful strategies used by medical schools to cap or reduce tuition.
18. Continue to monitor the availability of and encourage medical schools and residency/fellowship programs to (a) provide financial aid opportunities and financial planning/debt management counseling to medical students and resident/fellow physicians; (b) work with key stakeholders to develop and disseminate standardized information on these topics for use by medical students, resident/fellow physicians, and young physicians; and (c) share innovative approaches with the medical education community.
19. Seek federal legislation or rule changes that would stop Medicare and Medicaid decertification of physicians due to unpaid student loan debt. The AMA believes that it is improper for physicians not to repay their educational loans, but assistance should be available to those physicians who are experiencing hardship in meeting their obligations.
20. Related to the Public Service Loan Forgiveness (PSLF) Program, our AMA supports increased medical student and physician benefits the program, and will: (a) Advocate that all resident/fellow physicians have access to PSLF during their training years; (b) Advocate against a monetary cap on PSLF and other federal loan forgiveness programs; (c) Work with the United States Department of Education to ensure that any cap on loan forgiveness under PSLF be at least equal to the principal amount borrowed; (d) Ask the United States Department of Education to include all terms of PSLF in the contractual obligations of the Master Promissory Note; (e) Encourage the Accreditation Council for Graduate Medical Education (ACGME) to require residency/fellowship programs to include within the terms, conditions, and benefits of program appointment information on the PSLF program qualifying status of the employer; (f) Advocate that the profit status of a physician's training institution not be a factor for PSLF eligibility; (g) Encourage medical school financial advisors to counsel wise borrowing by medical students, in the event that the PSLF program is eliminated or severely curtailed; (h) Encourage medical school financial advisors to increase medical student engagement in service-based loan repayment options, and other federal and military programs, as an attractive alternative to the PSLF in terms of financial prospects as well as providing the opportunity to provide care in medically underserved areas; (i) Strongly advocate that the terms of the PSLF that existed at the time of the agreement remain unchanged for any program participant in the event of any future restrictive changes.
21. Advocate for continued funding of programs including Income-Driven Repayment plans for the benefit of reducing medical student load burden.
Citation: CME Report 05, I-18; Appended: Res. 953, I-18

AMERICAN MEDICAL ASSOCIATION HOUSE OF DELEGATES

Resolution: 307
(A-19)

Introduced by: New York

Subject: Mental Health Services for Medical Students

Referred to: Reference Committee C
(Nicole Riddle, MD, Chair)

Whereas, Medical students have a higher rate of depression, burnout, and suicidal ideation than the general population; and

Whereas, The Association of American Medical Colleges' recommendations regarding health services for medical students includes giving all students access to confidential counseling by mental health professionals as well as keeping records confidential; and

Whereas, The lack of resources often keep schools from implementing these recommendations; and

Whereas, There is significant concern regarding the stigma of mental illness among medical students who may benefit from mental health services; and

Whereas, Demanding schedules, cost and stigma interfere with access to treatment; therefore be it

RESOLVED, That our American Medical Association recommend that the Association of American Medical Colleges strengthen their recommendations to all medical schools that medical schools provide confidential in-house mental health services at no cost to students, without billing health insurance, and that they set up programs to educate both students and staff about burnout, depression, and suicide. (Directive to Take Action)

Fiscal Note: Minimal - less than $1,000.

Received: 04/25/19

AMERICAN MEDICAL ASSOCIATION HOUSE OF DELEGATES

Resolution: 308
(A-19)

Introduced by: New York

Subject: Maintenance of Certification Moratorium

Referred to: Reference Committee C
(Nicole Riddle, MD, Chair)

Whereas, Many physicians find elements of Continuous Certification/Maintenance of Certification (MOC) problematic; and

Whereas, Elements of MOC do not reflect the manner in which medicine is practiced; and

Whereas, Endless certification has become another element which contributes to physician stress and burnout; and

Whereas, MOC has harmed physicians--physically, emotionally, and economically; and

Whereas, Boards have reaped wealth at the expense of their diplomates; and

Whereas, Other professions require continuing education and professionalism, but none require secure examinations or "knowledge check-ins;" and

Whereas, The draft report of the Vision Initiative has found these issues and more; and

Whereas, The American College of Physicians, the National Board of Physicians and Surgeons, and the American Association of Plastic Surgeons and many state societies have all commented on the problematic state of MOC; therefore be it

RESOLVED, That our American Medical Association call for an immediate end to the high stakes examination components as well as an end to the Quality Initiative (QI)/Practice Improvement (PI) components of Maintenance of Certification (MOC) (Directive to Take Action); and be it further

RESOLVED, That our AMA call for retention of continuing medical education (CME) and professionalism components (how physicians carry out their responsibilities safely and ethically) of MOC only (Directive to Take Action); and be it further

RESOLVED, That our AMA petition the American Board of Medical Specialties for the restoration of certification status for all diplomates who have lost certification status solely because they have not complied with MOC requirements. (Directive to Take Action)

Fiscal Note: Minimal - less than $1,000.

Received: 04/25/19

The topic of this resolution is currently under study by the Council on Medical Education.

AMERICAN MEDICAL ASSOCIATION HOUSE OF DELEGATES

Resolution: 309
(A-19)

Introduced by: New York

Subject: Promoting Addiction Medicine During a Time of Crisis

Referred to: Reference Committee C
(Nicole Riddle, MD, Chair)

Whereas, The ongoing opioid crisis persists with statistics showing that overdose deaths remain prevalent despite quantity limits, prescription monitoring programs, and mandatory physician education; and

Whereas, The expense of this problem is growing with its devastating toll on those with substance use disorders and their families; and

Whereas, Medication assisted treatment programs have become perceived as the most successful intervention; and

Whereas, Most medical students we encounter state that they have very little exposure to the current protocols and management and admit that this is inadequately covered in current medical education; and

Whereas, Recently the American Board of Preventive Medicine under the American Board of Medical Specialties has taken over the credentialing and administering the path to board certification, in essence, legitimizing it as a recognized medical subspecialty; and

Whereas, Addiction medicine science includes, but is not limited to: history of drug abuse, genetics pharmacology, epidemiology, medical evaluation and management, treatment settings, behavioral health methodologies, toxicology, covering all substances, e.g. opiates, alcohol, nicotine, stimulants, hallucinogens; therefore be it

RESOLVED, That our American Medical Association endorse and support the incorporation of addiction medicine science into medical student education and residency training (New HOD Policy); and be it further

RESOLVED, That our AMA transmit this resolution to the Liaison Committee on Medical Education, the Commission on Osteopathic College Accreditation, the American Osteopathic Association and the Accreditation Council for Graduate Medical Education (ACGME). (Directive to Take Action)

Fiscal Note: Minimal - less than $1,000.

Received: 04/25/19

AMERICAN MEDICAL ASSOCIATION HOUSE OF DELEGATES

Resolution: 310
(A-19)

Introduced by: New York

Subject: Mental Health Care for Medical Students

Referred to: Reference Committee C
(Nicole Riddle, MD, Chair)

Whereas, Prior to matriculating, medical students have been shown to have lower rates of burnout and depression than the general population[1], but active medical students are more likely to show symptoms of depression and fatigue than the general population;[2] and

Whereas, In the United States, the prevalence of clinical depression in first year medical students is greater than one in three students yet less than 15% of depressed medical students seek treatment;[3] and

Whereas, Approximately 50% of medical students report burnout, and over 10% report suicidal ideation;[4] and

Whereas, Stigma and barriers relating to self-perception and perception by others are higher in medical students than in the general population with regards to mental health treatment;[5] and

Whereas, Financial and scheduling barriers often limit medical students' utilization of mental health providers recommended by students' medical schools;[6] and

Whereas, Physician well-being has been correlated with physician empathy, communication skills, and critical reflection on practice methods,[7] thus impacting patients as well as physicians; and

Whereas, The Medical Society of the State of New York acknowledges the reality of burnout and depression in physicians and supports measures to mitigate these issues, yet does not address the low utilization of mental health services by medical students; and

Whereas, Opt-out models for mental health resources in residents have shown higher utilization rates than traditional opt-in models;[8] therefore be it

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[1] Brazeau CM, Shanafelt T, Durning SJ, Massie FS, Eacker A, Moutier C, Satele DV, Sloan JA, Dyrbye LN. Distress among matriculating medical students relative to the general population. *Acad Med* 2014;89(11):1520-1525.
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[3] Puthran R, Zhang MW, Tam WW, Ho RC. Prevalence of depression amongst medical students: a meta-analysis. *Med Educ* 2016;50(4):456-468.
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RESOLVED, That our American Medical Association encourage all medical schools to assign a mental health provider to every incoming medical student (New HOD Policy); and be it further

RESOLVED, That our AMA encourage all medical schools to provide an easy way for medical students to select a different provider at any time (New HOD Policy); and be it further

RESOLVED, That our AMA encourage all medical schools to require each student's mental health professional or related staff to contact the student once per semester to ask if the student would like to meet with their mental health professional, unless the student already has an appointment to do so or has asked not to be contacted with regards to mental health appointments (New HOD Policy); and be it further

RESOLVED, That our AMA encourage all medical schools to provide an easy process for students to initiate treatment with school mental health professionals at no cost to the student or professional from the mental health community at affordable cost to the student, and without undue bureaucratic burden. (New HOD Policy)

Fiscal Note: Minimal - less than $1,000.

Received: 04/25/19

AMERICAN MEDICAL ASSOCIATION HOUSE OF DELEGATES

Resolution: 311
(A-19)

Introduced by: International Medical Graduates Section

Subject: Grandfathering Qualified Applicants Practicing in U.S. Institutions with Restricted Medical Licensure

Referred to: Reference Committee C
(Nicole Riddle, MD, Chair)

Whereas, IMGs in the past were permitted to work in academic institutions, either for their specific skills or a need due to fill unmet patient care needs in certain physician specialties or geographical areas; and

Whereas, Physicians were allowed to work with an institutional or faculty temporary license granted by their local state medical board without having completed the USMLE examination, or without being American Board certified or eligible in their specialty; and

Whereas, These physicians completed medical school and specialty training abroad were often excellent candidates with strong curricula and their titles were recognized equivalent to the ones received in the U.S. by the receiving academic institution to allow them to work; and

Whereas, In recent years, these physicians faced the problem that many academic and non-academic institutions created rules to have only American Board certified physicians among their faculty/staff and were unwilling to grant institutional licenses any longer which creates a dramatic situation for these physicians who have practiced and trained U.S. medical students, residents and physicians in the U.S. for many years; and

Whereas, These IMGs admitted to work in the U.S. to fill a void and a need are now faced with losing their jobs without the ability to practice anywhere in the U.S.; and

Whereas, in the Commonwealth of Pennsylvania, an IMG or graduate of an unaccredited medical college may have their unmet qualifications waived by the Board if the applicant is determined to possess the educational background and technical skills and the waiver is considered to be beneficial to patients and the community; therefore be it

RESOLVED, That our American Medical Association work with the Federation of State Medical Boards, the Organized Medical Staff Section and other stakeholders to advocate for state medical boards to support the licensure to practice medicine by physicians who have demonstrated they possess the educational background and technical skills and who are practicing in the U.S. health care system. (Directive to Take Action)

Fiscal Note: Modest - between $1,000 - $5,000.

Received: 05/01/19

RELEVANT AMA POLICY

Medical Specialty Board Certification Standards H-275.926
Our AMA:
1. Opposes any action, regardless of intent, that appears likely to confuse the public about the unique credentials of American Board of Medical Specialties (ABMS) or American Osteopathic Association Bureau of Osteopathic Specialists (AOA-BOS) board certified physicians in any medical specialty, or take advantage of the prestige of any medical specialty for purposes contrary to the public good and safety.
2. Continues to work with other medical organizations to educate the profession and the public about the ABMS and AOA-BOS board certification process. It is AMA policy that when the equivalency of board certification must be determined, accepted standards, such as those adopted by state medical boards or the Essentials for Approval of Examining Boards in Medical Specialties, be utilized for that determination.
3. Opposes discrimination against physicians based solely on lack of ABMS or equivalent AOA-BOS board certification, or where board certification is one of the criteria considered for purposes of measuring quality of care, determining eligibility to contract with managed care entities, eligibility to receive hospital staff or other clinical privileges, ascertaining competence to practice medicine, or for other purposes. Our AMA also opposes discrimination that may occur against physicians involved in the board certification process, including those who are in a clinical practice period for the specified minimum period of time that must be completed prior to taking the board certifying examination.
4. Advocates for nomenclature to better distinguish those physicians who are in the board certification pathway from those who are not.
5. Encourages member boards of the ABMS to adopt measures aimed at mitigating the financial burden on residents related to specialty board fees and fee procedures, including shorter preregistration periods, lower fees and easier payment terms.
Citation: Res. 318, A-07; Reaffirmation A-11; Modified: CME Rep. 2, I-15

Maintenance of Certification H-275.924
AMA Principles on Maintenance of Certification (MOC
1. Changes in specialty-board certification requirements for MOC programs should be longitudinally stable in structure, although flexible in content.
2. Implementation of changes in MOC must be reasonable and take into consideration the time needed to develop the proper MOC structures as well as to educate physician diplomates about the requirements for participation.
3. Any changes to the MOC process for a given medical specialty board should occur no more frequently than the intervals used by that specialty board for MOC.
4. Any changes in the MOC process should not result in significantly increased cost or burden to physician participants (such as systems that mandate continuous documentation or require annual milestones).
5. MOC requirements should not reduce the capacity of the overall physician workforce. It is important to retain a structure of MOC programs that permits physicians to complete modules with temporal flexibility, compatible with their practice responsibilities.
6. Patient satisfaction programs such as The Consumer Assessment of Healthcare Providers and Systems (CAHPS) patient survey are neither appropriate nor effective survey tools to assess physician competence in many specialties.
7. Careful consideration should be given to the importance of retaining flexibility in pathways for MOC for physicians with careers that combine clinical patient care with significant leadership, administrative, research and teaching responsibilities.
8. Legal ramifications must be examined, and conflicts resolved, prior to data collection and/or displaying any information collected in the process of MOC. Specifically, careful consideration must be given to the types and format of physician-specific data to be publicly released in conjunction with MOC participation.
9. Our AMA affirms the current language regarding continuing medical education (CME): "Each Member Board will document that diplomates are meeting the CME and Self-Assessment requirements for MOC Part II. The content of CME and self-assessment programs receiving credit for MOC will be relevant to advances within the diplomate's scope of practice, and free of commercial bias and direct support from pharmaceutical and device industries. Each diplomate will be required to complete CME credits (*AMA PRA Category 1 Credit*", American Academy of Family Physicians Prescribed, American College of Obstetricians and Gynecologists, and/or American Osteopathic Association Category 1A)."

10. In relation to MOC Part II, our AMA continues to support and promote the AMA Physician's Recognition Award (PRA) Credit system as one of the three major credit systems that comprise the foundation for continuing medical education in the U.S., including the Performance Improvement CME (PICME) format; and continues to develop relationships and agreements that may lead to standards accepted by all U.S. licensing boards, specialty boards, hospital credentialing bodies and other entities requiring evidence of physician CME.
11. MOC is but one component to promote patient safety and quality. Health care is a team effort, and changes to MOC should not create an unrealistic expectation that lapses in patient safety are primarily failures of individual physicians.
12. MOC should be based on evidence and designed to identify performance gaps and unmet needs, providing direction and guidance for improvement in physician performance and delivery of care.
13. The MOC process should be evaluated periodically to measure physician satisfaction, knowledge uptake and intent to maintain or change practice.
14. MOC should be used as a tool for continuous improvement.
15. The MOC program should not be a mandated requirement for licensure, credentialing, recredentialing, privileging, reimbursement, network participation, employment, or insurance panel participation.
16. Actively practicing physicians should be well-represented on specialty boards developing MOC.
17. Our AMA will include early career physicians when nominating individuals to the Boards of Directors for ABMS member boards.
18. MOC activities and measurement should be relevant to clinical practice.
19.The MOC process should be reflective of and consistent with the cost of development and administration of the MOC components, ensure a fair fee structure, and not present a barrier to patient care.
20. Any assessment should be used to guide physicians' self-directed study.
21. Specific content-based feedback after any assessment tests should be provided to physicians in a timely manner.
22. There should be multiple options for how an assessment could be structured to accommodate different learning styles.
23. Physicians with lifetime board certification should not be required to seek recertification.
24. No qualifiers or restrictions should be placed on diplomates with lifetime board certification recognized by the ABMS related to their participation in MOC.
25. Members of our House of Delegates are encouraged to increase their awareness of and participation in the proposed changes to physician self-regulation through their specialty organizations and other professional membership groups.
26. The initial certification status of time-limited diplomates shall be listed and publicly available on all American Board of Medical Specialties (ABMS) and ABMS Member Boards websites and physician certification databases. The names and initial certification status of time-limited diplomates shall not be removed from ABMS and ABMS Member Boards websites or physician certification databases even if the diplomate chooses not to participate in MOC.
27.Our AMA will continue to work with the national medical specialty societies to advocate for the physicians of America to receive value in the services they purchase for Maintenance of Certification from their specialty boards. Value in MOC should include cost effectiveness with full financial transparency, respect for physicians time and their patient care commitments, alignment of MOC requirements with other regulator and payer requirements, and adherence to an evidence basis for both MOC content and processes.
Citation: CME Rep. 16, A-09; Reaffirmed: CME Rep. 11, A-12; Reaffirmed: CME Rep. 10, A-12; Reaffirmed in lieu of Res. 313, A-12; Reaffirmed: CME Rep. 4, A-13; Reaffirmed in lieu of Res. 919, I-13; Appended: Sub. Res. 920, I-14; Reaffirmed: CME Rep. 2, A-15; Appended: Res. 314, A-15; Modified: CME Rep. 2, I-15; Reaffirmation A-16; Reaffirmed: Res. 309, A-16; Modified: Res. 307, I-16; Reaffirmed: BOT Rep. 05, I-16; Appended: Res. 319, A-17; Reaffirmed in lieu of: Res. 322, A-17; Modified: Res. 953, I-17

AMERICAN MEDICAL ASSOCIATION HOUSE OF DELEGATES

Resolution: 312
(A-19)

Introduced by: International Medical Graduates Section

Subject: Unmatched Medical Graduates to Address the Shortage of Primary Care Physicians

Referred to: Reference Committee C
(Nicole Riddle, MD, Chair)

Whereas, By 2030, demand for physicians will exceed supply by a range of 42,600 and 121,300. The lower estimate would represent more aggressive changes in care delivery patterns subsequent to the rapid growth in non-physician clinicians and widespread delayed retirement by currently practicing physicians;[1] and

Whereas, In 2025, largely resulting from the aging and growth of the U.S. population, the greater increase in demand compared with supply will result in a projected deficit of 23,640 FTE primary care physicians nationally[2]; and

Whereas, A shortfall of between 14,800 and 49,300 primary care physicians will persist despite a moderate increase in the use of advanced practice nurses (APRNs) and physician assistants (PAs); and

Whereas, A total of 7,826 active ECFMG applicants did not match in 2019[6]. In 2018, out of 43,909 registrants and 37,103 active applicants, only 32,967 got in to a residency position leading to a total of 10,942 unmatched medical graduates who registered on the National Residency Matching Program (NRMP) website which includes 4,136 unmatched active applicants; and

Whereas, Working as APRN or PA is not an option for these physicians because this would require going back to school and obtaining a different degree at a very high financial cost and also wasting years of education and millions of dollars in school debt, despite meeting the standard of qualifications necessary to practice medicine;[3] and

Whereas, Missouri, Kansas, and Arkansas have passed laws to allow unmatched graduates to work in medically underserved areas without doing a residency under the supervision of a licensed physician[4]. Their work is considered equivalent to that of a physician assistant for regulations of the Centers for Medicare and Medicaid Services (CMS) and those physicians can get credit towards their residency training as in Utah; and

Whereas, Other countries like the European Union allows physicians to practice as general practitioners after validation of the title by an accreditation body[5]. A medical graduate cannot practice medicine in the United States without at least one year of postgraduate residency; therefore be it

RESOLVED, That our American Medical Association advocate for the state medical boards to accept medical graduates who have passed USMLE Steps 1 and 2 as their criterion for limited license, thus using the existing physician workforce of trained and certified physicians in the primary care field and allowing them to get some credit towards their residency training as is being contemplated in Utah (Directive to Take Action); and be it further

RESOLVED, That our AMA work with regulatory, licensing, medical, and educational entities dealing with physician workforce issues: the American Board of Medical Specialties, the Association of American Medical Colleges (AAMC), the Association for Hospital Medical Education, Accreditation Council for Graduate Medical Education (ACGME), the Federation of State Medical Boards, and the National Medical Association work together to integrate unmatched physicians in the primary care workforce in order to address the projected physician shortage. (Directive to Take Action)

Fiscal Note: Modest - between $1,000 - $5,000.

Received: 05/01/19

References:
1 New research shows increasing physician shortages in both primary and specialty care
https://news.aamc.org/press-releases/article/workforce_report_shortage_04112018/
2 Projecting the Supply and Demand for Primary Care Practitioners Through 2020
https://bhw.hrsa.gov/health-workforce-analysis/primary-care-2020
3 International Medical Graduates in the US Physician Workforce
https://jaoa.org/article.aspx?articleid=2213422
4 Looming question for medical students: Will they be shut out of advanced training?
5 https://www.statnews.com/2016/03/17/medical-students-match-day/
6 https://euraxess.ec.europa.eu/spain/what-procedure-recognition-or-equivalence-foreign-university-qualification
Main Residency Match Data and Reports http://www.nrmp.org/main-residency-match-data/

RELEVANT AMA POLICY

Proposed Revisions to AMA Policy on the Financing of Medical Education Programs H-305.929
1. It is AMA policy that:
A. 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.
B. 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.
C. 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.
D. 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.
E. 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.
F. 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.
G. 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.
H. 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.
I. 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.
2. Our AMA endorses the following principles of social accountability and promotes their application to GME funding: (a) Adequate and diverse workforce development; (b) Primary care and specialty practice workforce distribution; (c) Geographic workforce distribution; and (d) Service to the local community and the public at large.

3. Our AMA encourages transparency of GME funding through models that are both feasible and fair for training sites, affiliated medical schools and trainees.
4. Our AMA believes that financial transparency is essential to the sustainable future of GME funding and therefore, regardless of the method or source of payment for GME or the number of funding streams, institutions should publically report the aggregate value of GME payments received as well as what these payments are used for, including: (a) Resident salary and benefits; (b) Administrative support for graduate medical education; (c) Salary reimbursement for teaching staff; (d) Direct educational costs for residents and fellows; and (e) Institutional overhead.
5. Our AMA supports specialty-specific enhancements to GME funding that neither directly nor indirectly reduce funding levels for any other specialty.
Policy Timeline
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 Appended: CME 05, A-16 Appended: Res. 319, A-16 Reaffirmation A-16

The Preservation, Stability and Expansion of Full Funding for Graduate Medical Education D-305.967
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 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.
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 and 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.
21. Our AMA will 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.
22. Our AMA will 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 support the value of GME to the nation.
23. Our AMA supports 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.
24. Our AMA will explore various models of all-payer funding for GME, especially as the Institute of Medicine (now a program unit of the National Academy of Medicine) did not examine those options in its 2014 report on GME governance and financing.
25. Our AMA encourages organizations with successful existing models to publicize and share strategies, outcomes and costs.
26. Our AMA encourages insurance payers and foundations to enter into partnerships with state and local agencies as well as academic medical centers and community hospitals seeking to expand GME.
27. Our AMA will develop, along with other interested stakeholders, a national campaign to educate the public on the definition and importance of graduate medical education, student debt and the state of the medical profession today and in the future.
28. Our AMA will collaborate with other stakeholder organizations to evaluate and work to establish consensus regarding the appropriate economic value of resident and fellow services.
29. Our AMA will monitor ongoing pilots and demonstration projects, and explore the feasibility of broader implementation of proposals that show promise as alternative means for funding physician education and training while providing appropriate compensation for residents and fellows.
30. Our AMA will monitor the status of the House Energy and Commerce Committee's response to public comments solicited regarding the 2014 IOM report, Graduate Medical Education That Meets the Nation's Health Needs, as well as results of ongoing studies, including that requested of the GAO, in order to formulate new advocacy strategy for GME funding, and will report back to the House of Delegates regularly on important changes in the landscape of GME funding.
31. Our AMA will advocate to the Centers for Medicare & Medicaid Services for flexibility beyond the current maximum of five years for the Medicare graduate medical education cap-setting deadline for new residency programs in underserved areas and/or economically depressed areas.
32. Our AMA will: (a) encourage all existing and planned allopathic and osteopathic medical schools to thoroughly research match statistics and other career placement metrics when developing career guidance plans; (b) strongly advocate for and work with legislators, private sector partnerships, and existing and planned osteopathic and allopathic medical schools to create and fund graduate medical education (GME) programs that can accommodate the equivalent number of additional medical school graduates consistent with the workforce needs of our nation; and (c) encourage the Liaison Committee on Medical Education (LCME), the Commission on Osteopathic College Accreditation (COCA), and other accrediting bodies, as part of accreditation of allopathic and osteopathic medical schools, to prospectively and retrospectively monitor medical school graduates' rates of placement into GME as well as GME completion.
33. Our AMA will investigate the status of implementation of AMA Policies D-305.973, "Proposed Revisions to AMA Policy on the Financing of Medical Education Programs" and D-305.967, "The Preservation, Stability and Expansion of Full Funding for Graduate Medical Education" and report back to the House of Delegates with proposed measures to resolve the problems of underfunding, inadequate number of residencies and geographic maldistribution of residencies.
Citation: 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; Modified: CME Rep. 9, A-15; Appended: CME Rep, 1, I-15; Appended: Res. 902, I-15; Reaffirmed: CME Rep. 3, A-16; Appended: Res. 320, A-16; Appended: CME Rep. 04, A-16; Appended: CME Rep. 05, A-16; Reaffirmation A-16; Appended: Res. 323, A-17; Appended: CME Rep. 03, A-18; Appended: Res. 319, A-18; Reaffirmed in lieu of: Res. 960, I-18

AMERICAN MEDICAL ASSOCIATION HOUSE OF DELEGATES

Resolution: 313
(A-19)

Introduced by: Resident and Fellow Section

Subject: Clinical Applications of Pathology and Laboratory Medicine for Medical Students, Residents and Fellows

Referred to: Reference Committee C
(Nicole Riddle, MD, Chair)

Whereas, Laboratory tests are the single highest volume medical activity that is vital for diagnostic and therapeutic decisions and patient care and often leads to additional downstream interventions and costly care[1,2]; and

Whereas, Medical errors including inappropriate use of laboratory tests are the third leading cause of death in the United States and lead to preventable morbidity and mortality[3,4]; and

Whereas, Appropriate laboratory test utilization can reduce healthcare costs and improve quality of care[5]; and

Whereas, The Centers for Disease Control and Prevention and other studies have found that poor knowledge and inappropriate use of laboratory tests by physicians is due in part to the lack of formal training during medical school[6-8]; and

Whereas, The Institute of Medicine supports enhanced training in diagnostic processes for healthcare professionals[9]; and

Whereas, The clinical applications of pathology and laboratory medicine are not a required clerkship in nearly half of all medical schools in the United States or are fragmented and poorly integrated into medical school curriculums[10-13]; and

Whereas, One third of medical school program directors express concern about the inadequate understanding of pathophysiology concepts by medical students[14]; and

Whereas, Consensus guidelines for clinical competencies and education in pathology and laboratory medicine have been established and recommended by the Association of Pathology Chairs and other leading pathologists in academic institutions and organizations[7,15-19]; therefore be it

RESOLVED, That our American Medical Association study current standards within medical education regarding pathology and laboratory medicine to identify potential gaps in training. (Directive to Take Action)

Fiscal Note: Modest - between $1,000 - $5,000.

Received: 05/01/19

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RELEVANT AMA POLICY

Competency Based Medical Education Across the Continuum of Education and Practice D-295.317

1. Our AMA Council on Medical Education will continue to study and identify challenges and opportunities and critical stakeholders in achieving a competency-based curriculum across the medical education continuum and other health professions that provides significant value to those participating in these curricula and their patients.
2. Our AMA Council on Medical Education will work to establish a framework of consistent vocabulary and definitions across the continuum of health sciences education that will facilitate competency-based curriculum, andragogy and assessment implementation.
3. Our AMA will continue to explore, with the Accelerating Change in Medical Education initiative and with other stakeholder organizations, the implications of shifting from time-based to competency-based medical education on residents' compensation and lifetime earnings.

Citation: CME Rep. 3, A-14; Appended: CME Rep. 04, A-16

Patient Safety Curricula in Undergraduate Medical Education D-295.942

1. Our AMA will explore the feasibility of asking the Liaison Committee on Medical Education to encourage the discussion of basic patient safety and quality improvement issues in medical school curricula.
2. Our AMA will encourage the Liaison Committee on Medical Education to include patient safety and quality of patient care curriculum within the core competencies of medical education in order to instill these fundamental skills in all undergraduate medial students.

Citation: (Res. 801, I-07; Appended: Res. 320, A-12

Voluntary Health Care Cost Containment H-155.998
(1) All physicians, including physicians in training, should become knowledgeable in all aspects of patient-related medical expenses, including hospital charges of both a service and professional nature. (2) Physicians should be cost conscious and should exercise discretion, consistent with good medical care, in determining the medical necessity for hospitalization and the specific treatment, tests and ancillary medical services to be provided a patient. (3) Medical staffs, in cooperation with hospital administrators, should embark now upon a concerted effort to educate physicians, including house staff officers, on all aspects of hospital charges, including specific medical tests, procedures, and all ancillary services. (4) Medical educators should be urged to include similar education for future physicians in the required medical school curriculum. (5) All physicians and medical staffs should join with hospital administrators and hospital governing boards nationwide in a conjoint and across-the-board effort to voluntarily contain and control the escalation of health care costs, individually and collectively, to the greatest extent possible consistent with good medical care. (6) All physicians, practicing solo or in groups, independently or in professional association, should review their professional charges and operating overhead with the objective of providing quality medical care at optimum reasonable patient cost through appropriateness of fees and efficient office management, thus favorably moderating the rate of escalation of health care costs. (7) The AMA should widely publicize and disseminate information on activities of the AMA and state, county and national medical specialty societies which are designed to control or reduce the costs of health care.
Citation: (Res. 34, A-78; Reaffirmed: CLRPD Rep. C, A-89; Res. 100, I-89; Res. 822, A-93; Reaffirmed: BOT Rep. 40, I-93; CMS Rep. 12, A-95; Reaffirmed: Res. 808, I-02; Modified: CMS Rep. 4, A-12

Systems-Based Practice Education for Medical Students and Resident/Fellow Physicians H-295.864
Our AMA: (1) supports the availability of educational resources and elective rotations for medical students and resident/fellow physicians on all aspects of systems-based practice, to improve awareness of and responsiveness to the larger context and system of health care and to aid in developing our next generation of physician leaders; (2) encourages development of model guidelines and curricular goals for elective courses and rotations and fellowships in systems-based practice, to be used by state and specialty societies, and explore developing an educational module on this topic as part of its Introduction to the Practice of Medicine (IPM) product; and (3) will request that undergraduate and graduate medical education accrediting bodies consider incorporation into their requirements for systems-based practice education such topics as health care policy and patient care advocacy; insurance, especially pertaining to policy coverage, claim processes, reimbursement, basic private insurance packages, Medicare, and Medicaid; the physician's role in obtaining affordable care for patients; cost awareness and risk benefit analysis in patient care; inter-professional teamwork in a physician-led team to enhance patient safety and improve patient care quality; and identification of system errors and implementation of potential systems solutions for enhanced patient safety and improved patient outcomes.
Citation: Sub. Res. 301, A-13; Reaffirmation I-15; Reaffirmed in lieu of: Res. 307, A-17

Recommendations for Future Directions for Medical Education H-295.995
Our AMA supports the following recommendations relating to the future directions for medical education:
(1) The medical profession and those responsible for medical education should strengthen the general or broad components of both undergraduate and graduate medical education. All medical students and resident physicians should have general knowledge of the whole field of medicine regardless of their projected choice of specialty.
(2) Schools of medicine should accept the principle and should state in their requirements for admission that a broad cultural education in the arts, humanities, and social sciences, as well as in the biological and physical sciences, is desirable.
(3) Medical schools should make their goals and objectives known to prospective students and premedical counselors in order that applicants may apply to medical schools whose programs are most in accord with their career goals.
(4) Medical schools should state explicitly in publications their admission requirements and the methods they employ in the selection of students.
(5) Medical schools should require their admissions committees to make every effort to determine that the students admitted possess integrity as well as the ability to acquire the knowledge and skills required of a physician.

(6) Although the results of standardized admission testing may be an important predictor of the ability of students to complete courses in the preclinical sciences successfully, medical schools should utilize such tests as only one of several criteria for the selection of students. Continuing review of admission tests is encouraged because the subject content of such examinations has an influence on premedical education and counseling.
(7) Medical schools should improve their liaison with college counselors so that potential medical students can be given early and effective advice. The resources of regional and national organizations can be useful in developing this communication.
(8) Medical schools are chartered for the unique purpose of educating students to become physicians and should not assume obligations that would significantly compromise this purpose.
(9) Medical schools should inform the public that, although they have a unique capability to identify the changing medical needs of society and to propose responses to them, they are only one of the elements of society that may be involved in responding. Medical schools should continue to identify social problems related to health and should continue to recommend solutions.
(10) Medical school faculties should continue to exercise prudent judgment in adjusting educational programs in response to social change and societal needs.
(11) Faculties should continue to evaluate curricula periodically as a means of insuring that graduates will have the capability to recognize the diverse nature of disease, and the potential to provide preventive and comprehensive medical care. Medical schools, within the framework of their respective institutional goals and regardless of the organizational structure of the faculty, should provide a broad general education in both basic sciences and the art and science of clinical medicine.
(12) The curriculum of a medical school should be designed to provide students with experience in clinical medicine ranging from primary to tertiary care in a variety of inpatient and outpatient settings, such as university hospitals, community hospitals, and other health care facilities. Medical schools should establish standards and apply them to all components of the clinical educational program regardless of where they are conducted. Regular evaluation of the quality of each experience and its contribution to the total program should be conducted.
(13) Faculties of medical schools have the responsibility to evaluate the cognitive abilities of their students. Extramural examinations may be used for this purpose, but never as the sole criterion for promotion or graduation of a student.
(14) As part of the responsibility for granting the MD degree, faculties of medical schools have the obligation to evaluate as thoroughly as possible the non-cognitive abilities of their medical students.
(15) Medical schools and residency programs should continue to recognize that the instruction provided by volunteer and part-time members of the faculty and the use of facilities in which they practice make important contributions to the education of medical students and resident physicians. Development of means by which the volunteer and part-time faculty can express their professional viewpoints regarding the educational environment and curriculum should be encouraged.
(16) Each medical school should establish, or review already established, criteria for the initial appointment, continuation of appointment, and promotion of all categories of faculty. Regular evaluation of the contribution of all faculty members should be conducted in accordance with institutional policy and practice.
(17a) Faculties of medical schools should reevaluate the current elements of their fourth or final year with the intent of increasing the breadth of clinical experience through a more formal structure and improved faculty counseling. An appropriate number of electives or selected options should be included. (17b) Counseling of medical students by faculty and others should be directed toward increasing the breadth of clinical experience. Students should be encouraged to choose experience in disciplines that will not be an integral part of their projected graduate medical education.
(18) Directors of residency programs should not permit medical students to make commitments to a residency program prior to the final year of medical school.
(19) The first year of postdoctoral medical education for all graduates should consist of a broad year of general training. (a) For physicians entering residencies in internal medicine, pediatrics, and general surgery, postdoctoral medical education should include at least four months of training in a specialty or specialties other than the one in which the resident has been appointed. (A residency in family practice provides a broad education in medicine because it includes training in several fields.) (b) For physicians entering residencies in specialties other than internal medicine, pediatrics, general surgery, and family practice, the first postdoctoral year of medical education should be devoted to one of the four above-named specialties or to a program following the general requirements of a transitional year stipulated in the "General Requirements" section of the "Essentials of Accredited Residencies." (c) A program for the

transitional year should be planned, designed, administered, conducted, and evaluated as an entity by the sponsoring institution rather than one or more departments. Responsibility for the executive direction of the program should be assigned to one physician whose responsibility is the administration of the program. Educational programs for a transitional year should be subjected to thorough surveillance by the appropriate accrediting body as a means of assuring that the content, conduct, and internal evaluation of the educational program conform to national standards. The impact of the transitional year should not be deleterious to the educational programs of the specialty disciplines.
(20) The ACGME, individual specialty boards, and respective residency review committees should improve communication with directors of residency programs because of their shared responsibility for programs in graduate medical education.
(21) Specialty boards should be aware of and concerned with the impact that the requirements for certification and the content of the examination have upon the content and structure of graduate medical education. Requirements for certification should not be so specific that they inhibit program directors from exercising judgment and flexibility in the design and operation of their programs.
(22) An essential goal of a specialty board should be to determine that the standards that it has set for certification continue to assure that successful candidates possess the knowledge, skills, and the commitment to upgrade continually the quality of medical care.
(23) Specialty boards should endeavor to develop a consensus concerning the significance of certification by specialty and publicize it so that the purposes and limitations of certification can be clearly understood by the profession and the public.
(24) The importance of certification by specialty boards requires that communication be improved between the specialty boards and the medical profession as a whole, particularly between the boards and their sponsoring, nominating, or constituent organizations and also between the boards and their diplomates.
(25) Specialty boards should consider having members of the public participate in appropriate board activities.
(26) Specialty boards should consider having physicians and other professionals from related disciplines participate in board activities.
(27) The AMA recommends to state licensing authorities that they require individual applicants, to be eligible to be licensed to practice medicine, to possess the degree of Doctor of Medicine or its equivalent from a school or program that meets the standards of the LCME or accredited by the American Osteopathic Association, or to demonstrate as individuals, comparable academic and personal achievements. All applicants for full and unrestricted licensure should provide evidence of the satisfactory completion of at least one year of an accredited program of graduate medical education in the US. Satisfactory completion should be based upon an assessment of the applicant's knowledge, problem-solving ability, and clinical skills in the general field of medicine. The AMA recommends to legislatures and governmental regulatory authorities that they not impose requirements for licensure that are so specific that they restrict the responsibility of medical educators to determine the content of undergraduate and graduate medical education.
(28) The medical profession should continue to encourage participation in continuing medical education related to the physician's professional needs and activities. Efforts to evaluate the effectiveness of such education should be continued.
(29) The medical profession and the public should recognize the difficulties related to an objective and valid assessment of clinical performance. Research efforts to improve existing methods of evaluation and to develop new methods having an acceptable degree of reliability and validity should be supported.
(30) Methods currently being used to evaluate the readiness of graduates of foreign medical schools to enter accredited programs in graduate medical education in this country should be critically reviewed and modified as necessary. No graduate of any medical school should be admitted to or continued in a residency program if his or her participation can reasonably be expected to affect adversely the quality of patient care or to jeopardize the quality of the educational experiences of other residents or of students in educational programs within the hospital.
(31) The Educational Commission for Foreign Medical Graduates should be encouraged to study the feasibility of including in its procedures for certification of graduates of foreign medical schools a period of observation adequate for the evaluation of clinical skills and the application of knowledge to clinical problems.
(32) The AMA, in cooperation with others, supports continued efforts to review and define standards for medical education at all levels. The AMA supports continued participation in the evaluation and accreditation of medical education at all levels.

(33) The AMA, when appropriate, supports the use of selected consultants from the public and from the professions for consideration of special issues related to medical education.
(34) The AMA encourages entities that profile physicians to provide them with feedback on their performance and with access to education to assist them in meeting norms of practice; and supports the creation of experiences across the continuum of medical education designed to teach about the process of physician profiling and about the principles of utilization review/quality assurance.
(35) Our AMA encourages the accrediting bodies for MD- and DO-granting medical schools to review, on an ongoing basis, their accreditation standards to assure that they protect the quality and integrity of medical education in the context of the emergence of new models of medical school organization and governance.
(36) Our AMA will strongly advocate for the rights of medical students, residents, and fellows to have physician-led (MD or DO as defined by the AMA) clinical training, supervision, and evaluation while recognizing the contribution of non-physicians to medical education.
(37) Our AMA will publicize to medical students, residents, and fellows their rights, as per Liaison Committee on Medical Education and Accreditation Council for Graduate Medical Education guidelines, to physician-led education and a means to report violations without fear of retaliation.
Citation: CME Rep. B, A-82; Amended: CLRPD Rep. A, I-92; Res. 331, I-95; Reaffirmed by Res. 322, A-97; Reaffirmation I-03; Modified: CME Rep. 7, A-05; Modified: CME Rep. 2, I-05; Appended: CME Rep. 5, A-11; Reaffirmed: CME Rep. 3, A-11; Modified: CME Rep. 01, I-17; Appended: Res. 961, I-18

Resident Education in Laboratory Utilization H-310.960
Our AMA endorses the concept of practicing physicians devoting time with medical students and resident physicians for chart reviews focusing on appropriate test ordering in patient care.
Citation: (Res. 84, A-91; Reaffirmed: Sunset Report, I-01; Reaffirmed: CME Rep. 2, A-11

Improving Genetic Testing and Counseling Services H-480.944
Our AMA supports: (1) appropriate utilization of genetic testing, pre- and post-test counseling for patients undergoing genetic testing, and physician preparedness in counseling patients or referring them to qualified genetics specialists; (2) the development and dissemination of guidelines for best practice standards concerning pre- and post-test genetic counseling; and (3) research and open discourse concerning issues in medical genetics, including genetic specialist workforce levels, physician preparedness in the provision of genetic testing and counseling services, and impact of genetic testing and counseling on patient care and outcomes.
Citation: Res. 913, I-16

AMERICAN MEDICAL ASSOCIATION HOUSE OF DELEGATES

Resolution: 314
(A-19)

Introduced by: Resident and Fellow Section

Subject: Evaluation of Changes to Residency and Fellowship Application and Matching Processes

Referred to: Reference Committee C
(Nicole Riddle, MD, Chair)

Whereas, The Association of American Medical Colleges (AAMC) is currently piloting a new, mandatory Standardized Video Interview (SVI) for students applying to emergency medicine residency programs[1]; and

Whereas, The SVI requires students to provide video-taped responses to six questions intended to evaluate a student's professionalism and interpersonal/communication skills, each displayed for 30 seconds, and have as many as 3 minutes to respond to each question[2]; and

Whereas, During the pilot, videos will be scored by third-party trained raters, yet the AAMC expects that human review would likely be replaced by computer-based analysis should the SVI expand to other specialties[3]; and

Whereas, The AAMC has yet to demonstrate that computer-based analysis of video-responses is non-inferior to human rating; and

Whereas, The AAMC working group that evaluated the voluntary pilot did not include medical students; and

Whereas, The AAMC reports that the research pilot showed that the SVI "measures something different than academic competency," but was unable to demonstrate correlation between SVI scores and residency placement, performance in residency or performance in the target competencies[4]; and

Whereas, The AAMC has not provided any estimate of costs or information regarding who would pay for this program should the SVI continue beyond its operational pilot; and

Whereas, No data is available to demonstrate that the SVI will not discriminate against underrepresented minority (URM), LGBTQ, non-native English speakers and other students who may be adversely affected by implicit bias during the residency application process; therefore be it

RESOLVED, That our American Medical Association support proposed changes to residency and fellowship application requirements only when (a) those changes have been evaluated by working groups which have students and residents as representatives; (b) there are data which demonstrates that the proposed application components contribute to an accurate representation of the candidate; (c) there are data available to demonstrate that the new application requirements reduce, or at least do not increase, the impact of implicit bias that affects medical students and residents from underrepresented minority backgrounds; and (4) the costs to medical students and residents are mitigated (New HOD Policy): and be it further

RESOLVED, That our AMA oppose the introduction of new and mandatory requirements that fundamentally alter the residency and fellowship application process until such time as the above conditions are met (New HOD Policy); and be it further

RESOLVED, That our AMA continue to work with specialty societies, the Association of American Medical Colleges, the National Resident Matching Program and other relevant stakeholders to improve the application process in an effort to accomplish these requirements. (Directive to Take Action)

Fiscal Note: Minimal - less than $1,000.

Received: 05/01/19

References:
1 AAMC Standardized Video Interview. https://students-residents.aamc.org/applying-residency/article/aamc-standardized-video-interview-research-study/. Published April 3, 2017. Accessed September 7, 2017.
2 AAMC Standardized Video Interview Frequently Asked Questions. AAMC Students, Applicants and Residents. https://students-residents.aamc.org/attending-medical-school/article/aamc-standardized-video-interview-faqs/. Published April 3, 2017. Accessed September 4, 2017.
3 AAMC Standardized Video Interview Update. https://aamc-orange.global.ssl.fastly.net/production/media/filer_public/c7/6f/c76f2e9f-ccd4-428e-9710-e9bdcea2a9d0/standardized_video_interview_summary_2017_gsa.pdf. Published May 2017.
4 Standardized Video Interview Update for Applicants Webinar. AAMC Students, Applicants and Residents. https://students-residents.aamc.org/video/svi-update-applicants-webinar/?edit_off. Published June 6, 2017. Accessed September 5, 2017.

RELEVANT AMA POLICY

Clinical Skills Assessment During Medical School D-295.988
1. Our AMA will encourage its representatives to the Liaison Committee on Medical Education (LCME) to ask the LCME to determine and disseminate to medical schools a description of what constitutes appropriate compliance with the accreditation standard that schools should "develop a system of assessment" to assure that students have acquired and can demonstrate core clinical skills.
2. Our AMA will work with the Federation of State Medical Boards, National Board of Medical Examiners, state medical societies, state medical boards, and other key stakeholders to pursue the transition from and replacement for the current United States Medical Licensing Examination (USMLE) Step 2 Clinical Skills (CS) examination and the Comprehensive Osteopathic Medical Licensing Examination (COMLEX) Level 2-Performance Examination (PE) with a requirement to pass a Liaison Committee on Medical Education-accredited or Commission on Osteopathic College Accreditation-accredited medical school-administered, clinical skills examination.
3. Our AMA will work to: (a) ensure rapid yet carefully considered changes to the current examination process to reduce costs, including travel expenses, as well as time away from educational pursuits, through immediate steps by the Federation of State Medical Boards and National Board of Medical Examiners; (b) encourage a significant and expeditious increase in the number of available testing sites; (c) allow international students and graduates to take the same examination at any available testing site; (d) engage in a transparent evaluation of basing this examination within our nation's medical schools, rather than administered by an external organization; and (e) include active participation by faculty leaders and assessment experts from U.S. medical schools, as they work to develop new and improved methods of assessing medical student competence for advancement into residency.

4. Our AMA is committed to assuring that all medical school graduates entering graduate medical education programs have demonstrated competence in clinical skills.
5. Our AMA will continue to work with appropriate stakeholders to assure the processes for assessing clinical skills are evidence-based and most efficiently use the time and financial resources of those being assessed.
6. Our AMA encourages development of a post-examination feedback system for all USMLE test-takers that would: (a) identify areas of satisfactory or better performance; (b) identify areas of suboptimal performance; and (c) give students who fail the exam insight into the areas of unsatisfactory performance on the examination.
7. Our AMA, through the Council on Medical Education, will continue to monitor relevant data and engage with stakeholders as necessary should updates to this policy become necessary.
Citation: CME Rep. 7, I-99; Reaffirmed: CME Rep. 2, A-09; Appended: Alt. Res. 311, A-16; Appended: CME Rep. 09, A-17

National Resident Matching Program Reform D-310.977
Our AMA:
(1) will work with the National Resident Matching Program to develop and distribute educational programs to better inform applicants about the NRMP matching process
(2) will actively participate in the evaluation of, and provide timely comments about, all proposals to modify the NRMP Match
(3) will request that the NRMP explore the possibility of including the Osteopathic Match in the NRMP Match
(4) will continue to review the NRMP's policies and procedures and make recommendations for improvements as the need arises
(5) will work with the Accreditation Council for Graduate Medical Education and other appropriate agencies to assure that the terms of employment for resident physicians are fair and equitable and reflect the unique and extensive amount of education and experience acquired by physicians
(6) does not support the current the "All-In" policy for the Main Residency Match to the extent that it eliminates flexibility within the match process
(7) will work with the NRMP, and other residency match programs, in revising Match policy, including the secondary match or scramble process to create more standardized rules for all candidates including application timelines and requirements
(8) will work with the NRMP and other external bodies to develop mechanisms that limit disparities within the residency application process and allow both flexibility and standard rules for applicant
(9) encourages the National Resident Matching Program to study and publish the effects of implementation of the Supplemental Offer and Acceptance Program on the number of residency spots not filled through the Main Residency Match and include stratified analysis by specialty and other relevant areas
(10) will work with the National Resident Matching Program (NRMP) and Accreditation Council for Graduate Medical Education (ACGME) to evaluate the challenges in moving from a time-based education framework toward a competency-based system, including: a) analysis of time-based implications of the ACGME milestones for residency programs; b) the impact on the NRMP and entry into residency programs if medical education programs offer variable time lengths based on acquisition of competencies; c) the impact on financial aid for medical students with variable time lengths of medical education programs; d) the implications for interprofessional education and rewarding teamwork; and e) the implications for residents and students who achieve milestones earlier or later than their peers
(11) will work with the Association of American Medical Colleges (AAMC), American Osteopathic Association (AOA), American Association of Colleges of Osteopathic Medicine (AACOM), and National Resident Matching Program (NRMP) to evaluate the current available data or propose new studies that would help us learn how many students graduating from US medical schools each year do not enter into a US residency program; how many never enter into a US residency program; whether there is disproportionate impact on individuals of minority racial and ethnic groups; and what careers are pursued by those with an MD or DO degree who do not enter residency programs
(12) will work with the AAMC, AOA, AACOM and appropriate licensing boards to study whether US medical school graduates and international medical graduates who do not enter residency programs may be able to serve unmet national health care needs
(13) will work with the AAMC, AOA, AACOM and the NRMP to evaluate the feasibility of a national tracking system for US medical students who do not initially match into a categorical residency program

(14) will discuss with the National Resident Matching Program, Association of American Medical Colleges, American Osteopathic Association, Liaison Committee on Medical Education, Accreditation Council for Graduate Medical Education, and other interested bodies potential pathways for reengagement in medicine following an unsuccessful match and report back on the results of those discussions
(15) encourages the Association of American Medical Colleges to work with U.S. medical schools to identify best practices, including career counseling, used by medical schools to facilitate successful matches for medical school seniors, and reduce the number who do not match
(16) supports the movement toward a unified and standardized residency application and match system for all non-military residencies; and
(17) encourages the Educational Commission for Foreign Medical Graduates (ECFMG) and other interested stakeholders to study the personal and financial consequences of ECFMG-certified U.S. IMGs who do not match in the National Resident Matching Program and are therefore unable to get a residency or practice medicine.
Citation: CME Rep. 4, A-05; Appended: Res. 330, A-11; Appended: Res. 920, I-11; Appended: Res. 311, A-14; Appended: Res. 312, A-14; Appended: Res. 304, A-15; Appended: CME Rep. 03, A-16; Reaffirmation: A-16; Appended: CME Rep. 06, A-17; Appended: Res. 306, A-17; Modified: Speakers Rep. 01, A-17

Technology and the Practice of Medicine G-615.035
Our AMA encourages the collaboration of existing AMA Councils and working groups on matters of new and developing technology, particularly electronic medical records (EMR) and telemedicine.
Citation: (Res. 606, A-14)

Educating Competent and Caring Health Professionals H-295.975
(1) Programs of health professions education should foster educational strategies that encourage students to be independent learners and problem-solvers. Faculty of programs of education for the health professions should ensure that the mission statements of the institutions in which they teach include as an objective the education of practitioners who are both competent and compassionate.
(2) Admission to a program of health professions education should be based on more than grade point average and performance on admissions tests. Interviews, applicant essays, and references should continue to be part of the application process in spite of difficulties inherent in evaluating them. Admissions committees should review applicants' extra-curricular activities and employment records for indications of suitability for health professions education. Admissions committees should be carefully prepared for their responsibilities, and efforts should be made to standardize interview procedures and to evaluate the information gathered during interviews. Research should continue to focus on improving admissions procedures. Particular attention should be paid to improving evaluations of subjective personal qualities.
(3) Faculty of programs of education for the health professions must continue to emphasis than they have in the past on educating practitioners who are skilled in communications, interviewing and listening techniques, and who are compassionate and technically competent. Faculty of health professions education should be attentive to the environment in which education is provided; students should learn in a setting where respect and concern are demonstrated. The faculty and administration of programs of health professions education must ensure that students are provided with appropriate role models; whether a faculty member serves as an appropriate role model should be considered when review for promotion or tenure occurs. Efforts should be made by the faculty to evaluate the attitudes of students toward patients. Where these attitudes are found lacking, students should be counseled. Provisions for dismissing students who clearly indicate personality characteristics inappropriate to practice should be enforced.
(4) In spite of the high degree of specialization in health care, faculty of programs of education for the health professions must prepare students to provide integrated patient care; programs of education should promote an interdisciplinary experience for their students.
Citation: BOT Rep. NN, A-87; Modified: Sunset Report, I-97; Reaffirmed: CME Rep. 2, A-07; Reaffirmed: CME Rep. 01, A-17

Residents and Fellows' Bill of Rights H-310.912

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 this Resident/Fellows Physicians' 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 encourages teaching institutions to explore benefits to residents and fellows that will reduce personal cost of living expenditures, such as allowances for housing, childcare, and transportation.
6. Our AMA adopts the following 'Residents and Fellows' Bill of Rights' as applicable to all resident and fellow physicians in ACGME-accredited training programs:
RESIDENT/FELLOW PHYSICIANS' 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. It is neither feasible nor desirable to develop universally applicable and precise requirements for supervision of residents.
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. Compensation should reflect cost of living differences based on local economic factors, such as housing, transportation, and energy costs (which affect the purchasing power of wages), and include appropriate adjustments for changes in the cost of living.

(3) With Regard to Benefits, Residents and Fellows Must Be Fully Informed of and Should Receive: a. Quality and affordable comprehensive medical, mental health, dental, and vision care for residents and their families, as well as professional liability insurance and disability insurance to all residents for disabilities resulting from activities that are part of the educational program; b. An institutional written policy on and education in the signs of excessive fatigue, clinical depression, substance abuse and dependence, and other physician impairment issues; c. Confidential access to mental health and substance abuse services; d. A guaranteed, predetermined amount of paid vacation leave, sick leave, family and medical leave and educational/professional leave during each year in their training program, the total amount of which should not be less than six weeks; e. Leave in compliance with the Family and Medical Leave Act; and f. The conditions under which sleeping quarters, meals and laundry or their equivalent are to be provided.

F. Clinical and educational work hours that protect patient safety and facilitate resident well-being and education.

With regard to clinical and educational work hours, residents and fellows should experience: (1) A reasonable work schedule that is in compliance with clinical and educational work hour requirements set forth by the ACGME; and (2) At-home call that is not so frequent or demanding such that rest periods are significantly diminished or that clinical and educational work hour requirements are effectively circumvented. Refer to AMA Policy H-310.907, “Resident/Fellow Clinical and Educational Work Hours,” for more information.

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.

Citation: CME Rep. 8, A-11; Appended: Res. 303, A-14; Reaffirmed: Res. 915, I-15; Appended: CME Rep. 04, A-16; Modified: CME Rep. 06, I-18

Residency Interview Costs H-310.966
1. It is the policy of the AMA to pursue changes to federal legislation or regulation, specifically to the Higher Education Act, to include an allowance for residency interview costs for fourth-year medical students in the cost of attendance definition for medical education.

2. Our AMA will work with appropriate stakeholders, such as the Association of American Medical Colleges and the Accreditation Council for Graduate Medical Education, in consideration of the following strategies to address the high cost of interviewing for residency/fellowship: a) establish a method of collecting data on interviewing costs for medical students and resident physicians of all specialties for study, and b) support further study of residency/fellowship interview strategies aimed at mitigating costs associated with such interviews.
Citation: (Res. 265, A-90; Reaffirmed: Sunset Report, I-00; Modified: CME Rep. 2, A-10; Appended: Res. 308, A-15

Residency Interview Schedules H-310.998
Our AMA encourages residency and fellowship programs to incorporate in their interview dates increased flexibility, whenever possible, to accommodate applicants' schedules. Our AMA encourages the ACGME and other accrediting bodies to require programs to provide, by electronic or other means, representative contracts to applicants prior to the interview. Our AMA encourages residency and fellowship programs to inform applicants in a timely manner confirming receipt of application and ongoing changes in the status of consideration of the application.
Citation: (Res. 93, I-79; Reaffirmed: CLRPD Rep. B, I-89; Appended: Res. 302 and Res. 313, I-97; Reaffirmed: CME Rep. 2, A-07; Modified: Res. 302, A-14

AMERICAN MEDICAL ASSOCIATION HOUSE OF DELEGATES

Resolution: 315
(A-19)

Introduced by: Resident and Fellow Section

Subject: Scholarly Activity by Resident and Fellow Physicians

Referred to: Reference Committee C
(Nicole Riddle, MD, Chair)

Whereas, The current requirements for scholarly activity for resident physicians vary between medical specialties and there is no uniform definition; and

Whereas, The current Accreditation Council for Graduate Medical Education (ACGME) common program requirement for scholarly activity are broad and non-specific only stating that residents "should participate in scholarly activity"; and

Whereas, There are many ways to teach an understanding of research methods, including literature review in the form of journal clubs, lectures, and small group discussions of research methods; and

Whereas, The completion of a research project only educates the participant on one form of research methodology; and

Whereas, Seventy-five percent of the physicians who complete residency do not go on to pursue careers in academic medicine[1] and thus gain little experience relevant to their future careers from the mandatory completion of a research project; and

Whereas, This percentage is not different when emergency medicine residency programs that require research are compared to programs that do not require research[2]; and

Whereas, Boyer's model for scholarship was proposed for inclusion as part of the ACGME Common Program Requirements currently under revision, which emphasize that scholarly activity includes a wide variety of modalities, including discovery, integration, application, and teaching[3]; and

Whereas, Boyer's model of scholarship application involves problem solving and putting into practice the discoveries from research[3], not unlike the work done within national organizations such as the AMA; and

Whereas, Faculty in almost all medical and surgical specialties are allowed to use their national leadership experience within the AMA or specialty specific organizations as part of their

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[1] AAMC. "Report of Residents: Table C7. Full-Time Faculty-Appointment Status at U.S. Medical Schools for Residents Who Completed Residencies, by Specialty." Published December 2017. Accessed April 9, 2018. Available at https://www.aamc.org/data/484734/report-on-residents-2017-c7table.html.

[2] Geyer B, Kaji A, Katz E, et.al. (2015) "A National Evaluation of the Scholarly Activity Requirement in Residency Programs: A Survey of Emergency Medicine Program Directors." *Academic Emergency Medicine*. 22:11. 1337-44.

[3] Boyer E. (1990). *Scholarship Reconsidered: Priorities of the Professoriate*. Carnegie Foundation for the Advancement of Teaching. Accessed April 9, 2018. Available at https://depts.washington.edu/gs630/Spring/Boyer.pdf.

scholarly requirements[4] but trainees in those same specialties are not allowed to use that same national committee experience for the purpose of completing scholarly activity requirements[5]; and

Whereas, Proposed changes to the ACGME Common Program Requirements may still allow specialty-specific Review Committees to narrowly define scholarly activity as peer-reviewed publication only[6]; therefore be it

RESOLVED, That our American Medical Association define resident and fellow scholarly activity as any rigorous, skill-building experience approved by their program director that involves the discovery, integration, application, or teaching of knowledge, including but not limited to peer-reviewed publications, national leadership positions within health policy organizations, local quality improvement projects, curriculum development, or any activity which would satisfy faculty requirements for scholarly activity (New HOD Policy); and be it further

RESOLVED, That our AMA work with partner organizations to ensure that residents and fellows are able to fulfill scholarly activity requirements with any rigorous, skill-building experience approved by their program director that involves the discovery, integration, application, or teaching of knowledge, including but not limited to peer-reviewed publications, national leadership positions within health policy organizations, local quality improvement projects, curriculum development, or any activity which would satisfy faculty requirements for scholarly activity. (Directive to Take Action)

Fiscal Note: Modest - between $1,000 - $5,000.

Received: 05/01/19

RELEVANT AMA POLICY

Principles for Graduate Medical Education H-310.929
Our AMA urges the Accreditation Council for Graduate Medical Education (ACGME) to incorporate these principles in its Institutional Requirements, if they are not already present.
(1) PURPOSE OF GRADUATE MEDICAL EDUCATION AND ITS RELATIONSHIP TO PATIENT CARE. 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.
Exemplary patient care is a vital component for any residency/fellowship program. Graduate medical education enhances the quality of patient care in the institution sponsoring an accredited program. Graduate medical education must never compromise the quality of patient care. Institutions sponsoring residency programs and the director of each program must assure the highest quality of care for patients and the attainment of the program's educational objectives for the residents.
(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] ACGME. "Specialty-specific References for DIOs: Faculty Scholarly Activity ACGME." September 2017. Internet. Accessed April 9, 2018. https://www.acgme.org/Portals/0/PDFs/Specialty-specific%20Requirement%20Topics/DIO-Scholarly_Activity_Faculty.pdf.
[5] ACGME. "Specialty-specific References for DIOs: Resident/Fellow Scholarly Activity ACGME." September 2017. Internet. Accessed April 9, 2018. https://www.acgme.org/Portals/0/PDFs/Specialty-specific%20Requirement%20Topics/DIO-Scholarly_Activity_Resident-Fellow.pdf.
[6] ACGME. "ACGME Common Program Requirements (Residency) Sections I-V." Published 6 February 2018. Accessed April 2018. Available at http://www.acgme.org/Portals/0/PFAssets/ReviewandComment/CPR-Residency-2018-02-06-R&C.pdf.

(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 accreditation requirements of the ACGME, 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 and evaluate the clinical performance of resident physicians. The policies of the sponsoring institution, as enforced by the program director, and specified in the ACGME Institutional Requirements and related accreditation documents, must ensure that the clinical activities of each resident physician are supervised to a degree that reflects the ability of the resident physician and the level of responsibility for the care of patients that may be safely delegated to the resident. The sponsoring institution’s GME Committee must monitor programs’ supervision of residents and ensure that supervision is consistent with: (A) Provision of safe and effective patient care; (B) Educational needs of residents; (C) Progressive responsibility appropriate

to residents' level of education, competence, and experience; and (D) Other applicable Common and specialty/subspecialty specific Program Requirements. The program director, in cooperation with the institution, is responsible for maintaining work schedules for each resident based on the intensity and variability of assignments in conformity with ACGME Review Committee recommendations, and in compliance with the ACGME clinical and educational work hour standards. 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. Each patient's attending physician must decide, within guidelines established by the program director, the extent to which responsibility may be delegated to the resident, and the appropriate degree of supervision of the resident's participation in the care of the patient. The attending physician, or designate, must be available to the resident for consultation at all times.

(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.

Citation: CME Rep. 9, A-99; Reaffirmed: CME Rep. 2, A-09; Reaffirmed: CME Rep. 14, A-09; Modified: CME Rep. 06, I-18

AMERICAN MEDICAL ASSOCIATION HOUSE OF DELEGATES

Resolution: 316
(A-19)

Introduced by: Senior Physicians Section

Subject: Medical Student Debt

Referred to: Reference Committee C
(Nicole Riddle, MD, Chair)

Whereas, There is a marked increase in the senior patient population, as approximately 10,000 people turn 65 years of age each day[1]; and

Whereas, There is a current shortage of primary care physicians which will have a major impact on caring for the marked increase in senior patients; and

Whereas, The incidence of chronic disease in the aging population is expected to generate an increased need for primary care physicians, with deficits of 35,000-40,000 adult generalists projected by 2025[2]; and

Whereas, Three-quarters of medical school students graduated with debt in 2017, reporting a median debt amount of $192,000[3]; and

Whereas, Medical student debt is continuing to influence primary care specialty choice, with only a third of medical school graduates planning to practice in the primary care specialties of internal medicine, family medicine and pediatrics[2]; and

Whereas, There is a growing gap between the racial, ethnic and socioeconomic makeup of medical school classes and that of the general population, further pushing medical education out of reach for many poor and minority students[4]; and

Whereas, Multiple top tier medical schools including Kaiser Permanente and New York University plan to cover tuition for all current and future students as they recognize the increasing debt burden on young people who aspire to become physicians[5]; and

Whereas, The association among debt, specialty choice and income needs to be further examined to determine whether or not debt is a determinant of specialty choice or future income; and

Whereas, New models may help shape policies to better match the needs of society and to the aspirations of students who want to become physicians; and

Whereas, The AMA could convene medical schools to look at new approaches to examine to what extent these new schools have a common vision and approach to undergraduate medical education, and to spur other top medical schools to follow suit; therefore be it

RESOLVED, That our American Medical Association formulate a task force to look at undergraduate medical education training as it relates to specialty choice, and develop new polices and novel approaches to prevent debt from influencing primary care specialty choice. (Directive to Take Action)

Fiscal Note: Modest - between $1,000 - $5,000.

Received: 05/01/19

References:
1 Russell H. Baby Boomers Retire, Fact Tank, Pew Research Center, December 29, 2010, http://www.pewresearch.org/facttank/2010/12/29/baby-boomers-retire/ (accessed March 4, 2019).
2 Hsu, A.L. & Caverzagie, K. Educational Debt and Specialty Choice, Virtual Mentor. AMA Journal of Ethics, 2013;15(7):615-619. https://journalofethics.ama-assn.org/article/educational-debt-and-specialty-choice/2013-07 (accessed March 4, 2019).
3 The Association of American Medical Colleges An Updated Look at Attendance Cost and Medical Student Debt at U.S. Medical Schools, AAMC, Volume 17, Number 1, August 2017.
https://www.aamc.org/download/482236/data/august2017anupdatedlookatattendancecostandmedicalstudentdebtatu.pdf (accessed March 4, 2019).
4Talamantes, E., Henderson, M., Fancher, T. & Mullan, F. Closing the Gap – Making Medical School Admissions More Equitable. N Engl J Med 2019; 380:803-805. https://www.nejm.org/doi/full/10.1056/NEJMp1808582?query=TOC (accessed March 4, 2019).
5 Goodnough, A. Kaiser Permanente's New Medical School Will Waive Tuition for Its First 5 Classes, The New York Times. February 19, 2019,
https://www.nytimes.com/2019/02/19/health/kaiser-medical-school-free-.html (accessed March 4, 2019).

RELEVANT AMA POLICY

Principles of and Actions to Address Primary Care Workforce H-200.949

1. Our patients require a sufficient, well-trained supply of primary care physicians--family physicians, general internists, general pediatricians, and obstetricians/gynecologists--to meet the nation's current and projected demand for health care services.
2. To help accomplish this critical goal, our American Medical Association (AMA) will work with a variety of key stakeholders, to include federal and state legislators and regulatory bodies; national and state specialty societies and medical associations, including those representing primary care fields; and accreditation, certification, licensing, and regulatory bodies from across the continuum of medical education (undergraduate, graduate, and continuing medical education).
3. Through its work with these stakeholders, our AMA will encourage development and dissemination of innovative models to recruit medical students interested in primary care, train primary care physicians, and enhance both the perception and the reality of primary care practice, to encompass the following components: a) Changes to medical school admissions and recruitment of medical students to primary care specialties, including counseling of medical students as they develop their career plans; b) Curriculum changes throughout the medical education continuum; c) Expanded financial aid and debt relief options; d) Financial and logistical support for primary care practice, including adequate reimbursement, and enhancements to the practice environment to ensure professional satisfaction and practice sustainability; and e) Support for research and advocacy related to primary care.
4. Admissions and recruitment: The medical school admissions process should reflect the specific institution's mission. Those schools with missions that include primary care should consider those predictor variables among applicants that are associated with choice of these specialties.
5. Medical schools, through continued and expanded recruitment and outreach activities into secondary schools, colleges, and universities, should develop and increase the pool of applicants likely to practice primary care by seeking out those students whose profiles indicate a likelihood of practicing in primary care and underserved areas, while establishing strict guidelines to preclude discrimination.
6. Career counseling and exposure to primary care: Medical schools should provide to students career counseling related to the choice of a primary care specialty, and ensure that primary care physicians are well-represented as teachers, mentors, and role models to future physicians.
7. Financial assistance programs should be created to provide students with primary care experiences in ambulatory settings, especially in underserved areas. These could include funded preceptorships or summer work/study opportunities.
8. Curriculum: Voluntary efforts to develop and expand both undergraduate and graduate medical education programs to educate primary care physicians in increasing numbers should be continued. The establishment of appropriate administrative units for all primary care specialties should be encouraged.

9. Medical schools with an explicit commitment to primary care should structure the curriculum to support this objective. At the same time, all medical schools should be encouraged to continue to change their curriculum to put more emphasis on primary care.
10. All four years of the curriculum in every medical school should provide primary care experiences for all students, to feature increasing levels of student responsibility and use of ambulatory and community-based settings.
11. Federal funding, without coercive terms, should be available to institutions needing financial support to expand resources for both undergraduate and graduate medical education programs designed to increase the number of primary care physicians. Our AMA will advocate for public (federal and state) and private payers to a) develop enhanced funding and related incentives from all sources to provide education for medical students and resident/fellow physicians, respectively, in progressive, community-based models of integrated care focused on quality and outcomes (such as the patient-centered medical home and the chronic care model) to enhance primary care as a career choice; b) fund and foster innovative pilot programs that change the current approaches to primary care in undergraduate and graduate medical education, especially in urban and rural underserved areas; and c) evaluate these efforts for their effectiveness in increasing the number of students choosing primary care careers and helping facilitate the elimination of geographic, racial, and other health care disparities.
12. Medical schools and teaching hospitals in underserved areas should promote medical student and resident/fellow physician rotations through local family health clinics for the underserved, with financial assistance to the clinics to compensate their teaching efforts.
13. The curriculum in primary care residency programs and training sites should be consistent with the objective of training generalist physicians. Our AMA will encourage the Accreditation Council for Graduate Medical Education to (a) support primary care residency programs, including community hospital-based programs, and (b) develop an accreditation environment and novel pathways that promote innovations in graduate medical education, using progressive, community-based models of integrated care focused on quality and outcomes (such as the patient-centered medical home and the chronic care model).
14. The visibility of primary care faculty members should be enhanced within the medical school, and positive attitudes toward primary care among all faculty members should be encouraged.
15. Support for practicing primary care physicians: Administrative support mechanisms should be developed to assist primary care physicians in the logistics of their practices, along with enhanced efforts to reduce administrative activities unrelated to patient care, to help ensure professional satisfaction and practice sustainability.
16. There should be increased financial incentives for physicians practicing primary care, especially those in rural and urban underserved areas, to include scholarship or loan repayment programs, relief of professional liability burdens, and Medicaid case management programs, among others. Our AMA will advocate to state and federal legislative and regulatory bodies, among others, for development of public and/or private incentive programs, and expansion and increased funding for existing programs, to further encourage practice in underserved areas and decrease the debt load of primary care physicians. The imposition of specific outcome targets should be resisted, especially in the absence of additional support to the schools.
17. Our AMA will continue to advocate, in collaboration with relevant specialty societies, for the recommendations from the AMA/Specialty Society RVS Update Committee (RUC) related to reimbursement for E&M services and coverage of services related to care coordination, including patient education, counseling, team meetings and other functions; and work to ensure that private payers fully recognize the value of E&M services, incorporating the RUC-recommended increases adopted for the most current Medicare RBRVS.
18. Our AMA will advocate for public (federal and state) and private payers to develop physician reimbursement systems to promote primary care and specialty practices in progressive, community-based models of integrated care focused on quality and outcomes such as the patient-centered medical home and the chronic care model consistent with current AMA Policies H-160.918 and H-160.919.
19. There should be educational support systems for primary care physicians, especially those practicing in underserved areas.
20. Our AMA will urge urban hospitals, medical centers, state medical associations, and specialty societies to consider the expanded use of mobile health care capabilities.
21. Our AMA will encourage the Centers for Medicare & Medicaid Services to explore the use of telemedicine to improve access to and support for urban primary care practices in underserved settings.
22. Accredited continuing medical education providers should promote and establish continuing medical education courses in performing, prescribing, interpreting and reinforcing primary care services.

23. Practicing physicians in other specialties--particularly those practicing in underserved urban or rural areas--should be provided the opportunity to gain specific primary care competencies through short-term preceptorships or postgraduate fellowships offered by departments of family medicine, internal medicine, pediatrics, etc., at medical schools or teaching hospitals. In addition, part-time training should be encouraged, to allow physicians in these programs to practice concurrently, and further research into these concepts should be encouraged.
24. Our AMA supports continued funding of Public Health Service Act, Title VII, Section 747, and encourages advocacy in this regard by AMA members and the public.
25. Research: Analysis of state and federal financial assistance programs should be undertaken, to determine if these programs are having the desired workforce effects, particularly for students from disadvantaged groups and those that are underrepresented in medicine, and to gauge the impact of these programs on elimination of geographic, racial, and other health care disparities. Additional research should identify the factors that deter students and physicians from choosing and remaining in primary care disciplines. Further, our AMA should continue to monitor trends in the choice of a primary care specialty and the availability of primary care graduate medical education positions. The results of these and related research endeavors should support and further refine AMA policy to enhance primary care as a career choice.
Citation: CME Rep. 04, I-18

Principles of and Actions to Address Medical Education Costs and Student Debt H-305.925
The costs of medical education should never be a barrier to the pursuit of a career in medicine nor to the decision to practice in a given specialty. To help address this issue, our American Medical Association (AMA) will:
1. Collaborate with members of the Federation and the medical education community, and with other interested organizations, to address the cost of medical education and medical student debt through public- and private-sector advocacy.
2. Vigorously advocate for and support expansion of and adequate funding for federal scholarship and loan repayment programs—such as those from the National Health Service Corps, Indian Health Service, Armed Forces, and Department of Veterans Affairs, and for comparable programs from states and the private sector—to promote practice in underserved areas, the military, and academic medicine or clinical research.
3. Encourage the expansion of National Institutes of Health programs that provide loan repayment in exchange for a commitment to conduct targeted research.
4. Advocate for increased funding for the National Health Service Corps Loan Repayment Program to assure adequate funding of primary care within the National Health Service Corps, as well as to permit: (a) inclusion of all medical specialties in need, and (b) service in clinical settings that care for the underserved but are not necessarily located in health professions shortage areas.
5. Encourage the National Health Service Corps to have repayment policies that are consistent with other federal loan forgiveness programs, thereby decreasing the amount of loans in default and increasing the number of physicians practicing in underserved areas.
6. Work to reinstate the economic hardship deferment qualification criterion known as the “20/220 pathway,” and support alternate mechanisms that better address the financial needs of trainees with educational debt.
7. Advocate for federal legislation to support the creation of student loan savings accounts that allow for pre-tax dollars to be used to pay for student loans.
8. Work with other concerned organizations to advocate for legislation and regulation that would result in favorable terms and conditions for borrowing and for loan repayment, and would permit 100% tax deductibility of interest on student loans and elimination of taxes on aid from service-based programs.
9. Encourage the creation of private-sector financial aid programs with favorable interest rates or service obligations (such as community- or institution-based loan repayment programs or state medical society loan programs).
10. Support stable funding for medical education programs to limit excessive tuition increases, and collect and disseminate information on medical school programs that cap medical education debt, including the types of debt management education that are provided.
11. Work with state medical societies to advocate for the creation of either tuition caps or, if caps are not feasible, pre-defined tuition increases, so that medical students will be aware of their tuition and fee costs for the total period of their enrollment.
12. Encourage medical schools to (a) Study the costs and benefits associated with non-traditional instructional formats (such as online and distance learning, and combined baccalaureate/MD or DO

programs) to determine if cost savings to medical schools and to medical students could be realized without jeopardizing the quality of medical education; (b) Engage in fundraising activities to increase the availability of scholarship support, with the support of the Federation, medical schools, and state and specialty medical societies, and develop or enhance financial aid opportunities for medical students, such as self-managed, low-interest loan programs; (c) Cooperate with postsecondary institutions to establish collaborative debt counseling for entering first-year medical students; (d) Allow for flexible scheduling for medical students who encounter financial difficulties that can be remedied only by employment, and consider creating opportunities for paid employment for medical students; (e) Counsel individual medical student borrowers on the status of their indebtedness and payment schedules prior to their graduation; (f) Inform students of all government loan opportunities and disclose the reasons that preferred lenders were chosen; (g) Ensure that all medical student fees are earmarked for specific and well-defined purposes, and avoid charging any overly broad and ill-defined fees, such as but not limited to professional fees; (h) Use their collective purchasing power to obtain discounts for their students on necessary medical equipment, textbooks, and other educational supplies; (i) Work to ensure stable funding, to eliminate the need for increases in tuition and fees to compensate for unanticipated decreases in other sources of revenue; mid-year and retroactive tuition increases should be opposed.

13. Support and encourage state medical societies to support further expansion of state loan repayment programs, particularly those that encompass physicians in non-primary care specialties.

14. Take an active advocacy role during reauthorization of the Higher Education Act and similar legislation, to achieve the following goals: (a) Eliminating the single holder rule; (b) Making the availability of loan deferment more flexible, including broadening the definition of economic hardship and expanding the period for loan deferment to include the entire length of residency and fellowship training; (c) Retaining the option of loan forbearance for residents ineligible for loan deferment; (d) Including, explicitly, dependent care expenses in the definition of the “cost of attendance”; (e) Including room and board expenses in the definition of tax-exempt scholarship income; (f) Continuing the federal Direct Loan Consolidation program, including the ability to “lock in” a fixed interest rate, and giving consideration to grace periods in renewals of federal loan programs; (g) Adding the ability to refinance Federal Consolidation Loans; (h) Eliminating the cap on the student loan interest deduction; (i) Increasing the income limits for taking the interest deduction; (j) Making permanent the education tax incentives that our AMA successfully lobbied for as part of Economic Growth and Tax Relief Reconciliation Act of 2001; (k) Ensuring that loan repayment programs do not place greater burdens upon married couples than for similarly situated couples who are cohabitating; (l) Increasing efforts to collect overdue debts from the present medical student loan programs in a manner that would not interfere with the provision of future loan funds to medical students.

15. Continue to work with state and county medical societies to advocate for adequate levels of medical school funding and to oppose legislative or regulatory provisions that would result in significant or unplanned tuition increases.

16. Continue to study medical education financing, so as to identify long-term strategies to mitigate the debt burden of medical students, and monitor the short-and long-term impact of the economic environment on the availability of institutional and external sources of financial aid for medical students, as well as on choice of specialty and practice location.

17. Collect and disseminate information on successful strategies used by medical schools to cap or reduce tuition.

18. Continue to monitor the availability of and encourage medical schools and residency/fellowship programs to (a) provide financial aid opportunities and financial planning/debt management counseling to medical students and resident/fellow physicians; (b) work with key stakeholders to develop and disseminate standardized information on these topics for use by medical students, resident/fellow physicians, and young physicians; and (c) share innovative approaches with the medical education community.

19. Seek federal legislation or rule changes that would stop Medicare and Medicaid decertification of physicians due to unpaid student loan debt. The AMA believes that it is improper for physicians not to repay their educational loans, but assistance should be available to those physicians who are experiencing hardship in meeting their obligations.

20. Related to the Public Service Loan Forgiveness (PSLF) Program, our AMA supports increased medical student and physician benefits the program, and will: (a) Advocate that all resident/fellow physicians have access to PSLF during their training years; (b) Advocate against a monetary cap on PSLF and other federal loan forgiveness programs; (c) Work with the United States Department of Education to ensure that any cap on loan forgiveness under PSLF be at least equal to the principal amount borrowed; (d) Ask the United States Department of Education to include all terms of PSLF in the

contractual obligations of the Master Promissory Note; (e) Encourage the Accreditation Council for Graduate Medical Education (ACGME) to require residency/fellowship programs to include within the terms, conditions, and benefits of program appointment information on the PSLF program qualifying status of the employer; (f) Advocate that the profit status of a physician's training institution not be a factor for PSLF eligibility; (g) Encourage medical school financial advisors to counsel wise borrowing by medical students, in the event that the PSLF program is eliminated or severely curtailed; (h) Encourage medical school financial advisors to increase medical student engagement in service-based loan repayment options, and other federal and military programs, as an attractive alternative to the PSLF in terms of financial prospects as well as providing the opportunity to provide care in medically underserved areas; (i) Strongly advocate that the terms of the PSLF that existed at the time of the agreement remain unchanged for any program participant in the event of any future restrictive changes.
21. Advocate for continued funding of programs including Income-Driven Repayment plans for the benefit of reducing medical student load burden.
Citation: CME Report 05, I-18; Appended: Res. 953, I-18

The Preservation, Stability and Expansion of Full Funding for Graduate Medical Education D-305.967
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 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.
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 and 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.
21. Our AMA will 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.
22. Our AMA will 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 support the value of GME to the nation.
23. Our AMA supports 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.
24. Our AMA will explore various models of all-payer funding for GME, especially as the Institute of Medicine (now a program unit of the National Academy of Medicine) did not examine those options in its 2014 report on GME governance and financing.
25. Our AMA encourages organizations with successful existing models to publicize and share strategies, outcomes and costs.
26. Our AMA encourages insurance payers and foundations to enter into partnerships with state and local agencies as well as academic medical centers and community hospitals seeking to expand GME.
27. Our AMA will develop, along with other interested stakeholders, a national campaign to educate the public on the definition and importance of graduate medical education, student debt and the state of the medical profession today and in the future.
28. Our AMA will collaborate with other stakeholder organizations to evaluate and work to establish consensus regarding the appropriate economic value of resident and fellow services.
29. Our AMA will monitor ongoing pilots and demonstration projects, and explore the feasibility of broader implementation of proposals that show promise as alternative means for funding physician education and training while providing appropriate compensation for residents and fellows.
30. Our AMA will monitor the status of the House Energy and Commerce Committee's response to public comments solicited regarding the 2014 IOM report, Graduate Medical Education That Meets the Nation's Health Needs, as well as results of ongoing studies, including that requested of the GAO, in order to

formulate new advocacy strategy for GME funding, and will report back to the House of Delegates regularly on important changes in the landscape of GME funding.
31. Our AMA will advocate to the Centers for Medicare & Medicaid Services for flexibility beyond the current maximum of five years for the Medicare graduate medical education cap-setting deadline for new residency programs in underserved areas and/or economically depressed areas.
32. Our AMA will: (a) encourage all existing and planned allopathic and osteopathic medical schools to thoroughly research match statistics and other career placement metrics when developing career guidance plans; (b) strongly advocate for and work with legislators, private sector partnerships, and existing and planned osteopathic and allopathic medical schools to create and fund graduate medical education (GME) programs that can accommodate the equivalent number of additional medical school graduates consistent with the workforce needs of our nation; and (c) encourage the Liaison Committee on Medical Education (LCME), the Commission on Osteopathic College Accreditation (COCA), and other accrediting bodies, as part of accreditation of allopathic and osteopathic medical schools, to prospectively and retrospectively monitor medical school graduates' rates of placement into GME as well as GME completion.
33. Our AMA will investigate the status of implementation of AMA Policies D-305.973, "Proposed Revisions to AMA Policy on the Financing of Medical Education Programs" and D-305.967, "The Preservation, Stability and Expansion of Full Funding for Graduate Medical Education" and report back to the House of Delegates with proposed measures to resolve the problems of underfunding, inadequate number of residencies and geographic maldistribution of residencies.
Citation: 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; Modified: CME Rep. 9, A-15; Appended: CME Rep, 1, I-15; Appended: Res. 902, I-15; Reaffirmed: CME Rep. 3, A-16; Appended: Res. 320, A-16; Appended: CME Rep. 04, A-16; Appended: CME Rep. 05, A-16; Reaffirmation A-16; Appended: Res. 323, A-17; Appended: CME Rep. 03, A-18; Appended: Res. 319, A-18; Reaffirmed in lieu of: Res. 960, I-18

AMERICAN MEDICAL ASSOCIATION HOUSE OF DELEGATES

Resolution: 317
(A-19)

Introduced by: Resident and Fellow Section

Subject: A Study to Evaluate Barriers to Medical Education for Trainees with Disabilities

Referred to: Reference Committee C
(Nicole Riddle, MD, Chair)

Whereas, Section 504 of the Rehabilitation Act of 1973 states that individuals with disabilities should not "be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance[1];" and

Whereas, The Association of American Medical Colleges (AAMC) published guidelines for technical standards (TS) in 1979 in response to Section 504 of the Rehabilitation Act of 1973[2] which called for "certain minimal technical standards for physicians that must be examined and enforced in the admissions process" and placed an emphasis on the MD degree encompassing "a broad undifferentiated degree attesting to the acquisition of general knowledge in all fields of medicine and the basic skills requisite for the practice of medicine"[3,4]; and

Whereas, The above stated TS often emphasize sensorimotor over cognitive abilities, which therefore serve as a barrier for matriculation of students with disabilities[5] with research supporting this claim[6]; and

Whereas, The Americans with Disabilities Act of 1990 (ADA) prohibits institutions of higher education from discriminating against a qualified person on the basis of disability in admission or recruitment and requires entities that must comply with the law to make reasonable accommodations in order to afford an otherwise qualified applicant an equal opportunity to participate in institution's programs[7,8]; and

Whereas, Despite passage of the ADA, parity has not been realized for people with disabilities hopeful of starting a career in medicine as demonstrated by the fact that 19 percent of America's noninstitutionalized population has a disability[9] compared to 1 percent of medical

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[1] Section 504 of the Rehabilitation Act of 1973 - Disability Rights Education & Defense Fund. https://dredf.org/legal-advocacy/laws/section-504-of-the-rehabilitation-act-of-1973/. Accessed January 21, 2018.
[2] Association of American Medical Colleges. Report of the Special Advisory Panel on Technical Standards for Medical School Admission. *Assoc Am Med Coll*. 1979;Washington.
[3] Association of American Medical Colleges. 4.
[4] Association of American Medical Colleges. 5.
[5] Wainapel, F. S. Unjustified Barriers for Medical School Applicants with Physical Disabilities - American Medical Association Journal of Ethics (formerly Virtual Mentor). *Virtual Mentor*. 2015;17(2):160. doi:10.1001/VIRTUALMENTOR.2015.17.2.PFOR2-1502.
[6] Zazove P, Case B, Moreland C, et al. U.S. Medical Schools' Compliance With the Americans With Disabilities Act. *Acad Med*. 2016;91(7):979-986. doi:10.1097/ACM.0000000000001087.
[7] 42 U.S. Code § 12182 - Prohibition of discrimination by public accommodations | US Law | LII / Legal Information Institute. https://www.law.cornell.edu/uscode/text/42/12182. Accessed January 21, 2018.
[8] McKee M, Case B, Fausone M, Zazove P, Ouellette, Fetters and MD. Medical Schools' Willingness toAccommodate Medical Students with Sensory and Physical Disabilities: Ethical Foundations of a Functional Challenge to "Organic" Technical Standards. *AMA J Ethic*. 2016;18(10):993-1002. oi:10.1001/journalofethics.2016.18.10.medu1-1610.
[9] Brault MW. Americans with Disabilities: 2010. 2012. https://www.census.gov/newsroom/cspan/disability/20120726_cspan_disability_slides.pdf. Accessed January 21, 2018.

students[6] and 2-10 percent of practicing physicians[10] although technical accommodations are widely available and used; and

Whereas, The majority of US medical schools' and residencies' TS do not explicitly support accommodating disabilities and furthermore "do not support provision of reasonable accommodations for students with disabilities as intended by the ADA" thus precluding individuals with disabilities from enrolling[6]; and

Whereas, TS uphold the largely unspoken standard of the "undifferentiated physician"--meaning all students graduating from medical school should be able to enter any medical specialty--though this is an unrealistic expectation for even students without disabilities and therefore rejecting students with disabilities based on limitations that would qualify them as unfit for certain specialties is an unjustified exclusion[5,11]; and

Whereas, The majority of US medical schools' and residencies' TS require students to demonstrate certain physical, cognitive, behavioral, and sensory abilities without assistance, therefore, highlighting the students' limitations[6,8] and have not been revised since their original form in 1979; therefore be it

RESOLVED, That our American Medical Association work with relevant stakeholders to study available data on medical trainees with disabilities and consider revision of technical standards for medical education programs. (Directive to Take Action)

Fiscal Note: Modest - between $1,000 - $5,000.

Received: 05/01/19

RELEVANT AMA POLICY

Preserving Protections of the Americans with Disabilities Act of 1990 D-90.992
1. Our AMA supports legislative changes to the Americans with Disabilities Act of 1990, to educate state and local government officials and property owners on strategies for promoting access to persons with a disability.
2. Our AMA opposes legislation amending the Americans with Disabilities Act of 1990, that would increase barriers for disabled persons attempting to file suit to challenge a violation of their civil rights.
3. Our AMA will develop educational tools and strategies to help physicians make their offices more accessible to persons with disabilities, consistent with the Americans With Disabilities Act as well as any applicable state laws.
Citation: Res. 220, I-17

Support of Human Rights and Freedom H-65.965
Our AMA: (1) continues to support the dignity of the individual, human rights and the sanctity of human life, (2) reaffirms its long-standing policy that there is no basis for the denial to any human being of equal rights, privileges, and responsibilities commensurate with his or her individual capabilities and ethical character because of an individual's sex, sexual orientation, gender, gender identity, or transgender status, race, religion, disability, ethnic origin, national origin, or age; (3) opposes any discrimination based on an individual's sex, sexual orientation,

[10] DeLisa JA, Thomas P. Physicians with disabilities and the physician workforce: a need to reassess our policies. *Am J Phys Med Rehabil*. 2005;84(1):5-11. http://www.ncbi.nlm.nih.gov/pubmed/15632483. Accessed January 21, 2018.
[11] Hartman DW, Hartman CW. Disabled students and medical school admissions. *Arch Phys Med Rehabil*. 1981;62(2):90-91. http://www.ncbi.nlm.nih.gov/pubmed/6453567. Accessed January 21, 2018.

gender identity, race, religion, disability, ethnic origin, national origin or age and any other such reprehensible policies; (4) recognizes that hate crimes pose a significant threat to the public health and social welfare of the citizens of the United States, urges expedient passage of appropriate hate crimes prevention legislation in accordance with our AMA's policy through letters to members of Congress; and registers support for hate crimes prevention legislation, via letter, to the President of the United States.
Citation: CCB/CLRPD Rep. 3, A-14; Reaffirmed in lieu of: Res. 001, I-16; Reaffirmation: A-17

9.5.4 Civil Rights & Medical Professionals
Opportunities in medical society activities or membership, medical education and training, employment and remuneration, academic medicine and all other aspects of professional endeavors must not be denied to any physician or medical trainee because of race, color, religion, creed, ethnic affiliation, national origin, gender or gender identity, sexual orientation, age, family status, or disability or for any other reason unrelated to character, competence, ethics, professional status, or professional activities.
AMA Principles of Medical Ethics: IV
The Opinions in this chapter are offered as ethics guidance for physicians and are not intended to establish standards of clinical practice or rules of law.
Citation: Issued: 2016

AMERICAN MEDICAL ASSOCIATION HOUSE OF DELEGATES

Resolution: 318
(A-19)

Introduced by: Iowa

Subject: Rural Health Physician Workforce Disparities

Referred to: Reference Committee C
(Nicole Riddle, MD, Chair)

Whereas, Rural Americans are older, poorer, and have a higher incidence of disease and disability, increased mortality rates, lower life expectancy, and higher rates of pain and suffering; and

Whereas, Rural health disparities have become greater and the trend is continuing; and

Whereas, Rural Americans make up about 20% of the population, yet only 12% of America's primary care physicians and only 8% of specialty physicians are located in rural areas;[1] and

Whereas, Rural health provider organizations are reporting it is very difficult to recruit and retain providers because of large decreases in their Medicare payment due to Geographic Practice Cost Index (GPCI) adjustments; and

Whereas, GPCI payment adjustments are primarily based on 1) practice expenses (PE) and 2) physician work (PW) value; and

Whereas, The Centers for Medicare Services' (CMS) payment policies penalize rural physicians, while claiming that practice expenses (PE) are much lower--despite the lack of evidence that PE are less in rural areas; and

Whereas, The AMA's own analysis of data from the last nationwide (PPI) survey of practice expenses showed no difference in PE from large metropolitan, small metropolitan, or non-metropolitan areas;[2] and

Whereas, GPCI adjustments for PW have never used data regarding the actual market cost of physician labor (wages) in rural vs. large metropolitan areas--instead CMS has used other occupations as a proxy; and

Whereas, Data sources such as recruiting and locum tenens companies, as well as Doximity's website show that regional market data on physician wages (actual local cost of physician labor) has no relation to CMS' proxy-derived work GPCI index; and

Whereas, The data used by CMS for these PE and PW GPCI adjustments is non-transparent, outdated, inaccurate, and some of the data has never proven to be relevant; therefore be it

RESOLVED, That our American Medical Association undertake a study of issues regarding rural physician workforce shortages, including federal payment policy issues, and other causes and potential remedies to alleviate rural physician workforce shortages. (Directive to Take Action)

Fiscal Note: Modest - between $1,000 - $5,000.

Received: 05/01/19

References:
[1] Orlowski, J., & Dill, M. (2017). Rural America Faces Shortage of Physicians to Care for Rapidly Aging Population; Aging Today.
[2] Gillis, K. (2009). Physician Practice Expenses by Location. AMA Policy Research Perspectives.
[3] Doximity (2019). Career Navigator: Physician Compensation and Housing Cost Data Trends By County & Specialty.

RELEVANT AMA POLICY

Geographic Practice Cost Index D-400.985
Our AMA will: (1) use the AMA Physician Practice Information Survey to determine actual differences in rural vs. urban practice expenses; (2) seek Congressional authorization of a detailed study of the way rents are reflected in the Geographic Practice Cost Index (GPCI); (3) advocate that payments under physician quality improvement initiatives not be subject to existing geographic variation adjustments (i.e., GPCIs); and (4) provide annual updates on the Centers for Medicare and Medicaid Services efforts to improve the accuracy of Medicare Economic Index weights and geographic adjustments and their impact on the physician payment schedule, and AMA advocacy efforts on these issues.
Citation: (Sub. Res. 810, I-08; Reaffirmation A-09; Reaffirmed: BOT Action in response to referred for decision Res. 212, A-09; Appended: CMS Rep. 1, I-11; Reaffirmed in lieu of Res. 119, A-12 and Res. 122, A-12; Reaffirmation: I-12; Reaffirmation I-13

Elimination of Payment Differentials Between Urban and Rural Medical Care H-240.971
Our AMA (1) supports elimination of Medicare reimbursement differentials between urban and rural medical care; and (2) supports efforts to inform the Congress of the impact of such programs on the rural population.
Citation: (Res. 107, A-89; Reaffirmed: Sunset Report, A-00; Modified: CMS Rep. 6, A-10

Equal Pay for Equal Work D-400.989
Our AMA: (1) shall make its first legislative priority to fix the Medicare payment update problem because this is the most immediate means of increasing Medicare payments to physicians in rural states and will have the greatest impact; (2) shall seek enactment of legislation directing the General Accounting Office to develop and recommend to Congress policy options for reducing any unjustified geographic disparities in Medicare physician payment rates and improving physician recruitment and retention in underserved rural areas; and (3) shall advocate strongly to the current administration and Congress that additional funds must be put into the Medicare physician payment system and that continued budget neutrality is not an option.
Citation: (BOT Rep. 14, A-02; Reaffirmation A-06; Reaffirmation I-07; Reaffirmation A-08; Reaffirmed: Sub. Res. 810, I-08; Reaffirmation A-09; Reaffirmed: BOT Action in response to referred for decision Res. 212, A-09

Improving Rural Health Care H-465.994
The AMA (1) supports continued and intensified efforts to develop and implement proposals for improving rural health care, (2) urges physicians practicing in rural areas to be actively involved in these efforts, and (3) advocates widely publicizing AMA's policies and proposals for improving rural health care to the profession, other concerned groups, and the public.
Citation: Sub. Res. 72, I-88; Reaffirmed: Sunset Report, I-98; Reaffirmed: CLRPD Rep. 1, A-08; Reaffirmed: CEJA Rep. 06, A-18

Access to and Quality of Rural Health Care H-465.997
(1) Our AMA believes that solutions to access problems in rural areas should be developed through the efforts of voluntary local health planning groups, coordinated at the regional or state level by a similar voluntary health planning entity. Regional or statewide coordination of local efforts will not only help to remedy a particular community's problems, but will also help to avoid and, if necessary, resolve existing duplication of health care resources. (2) In addition to local solutions, our AMA believes that on a national level, the implementation of Association policy for providing the uninsured and underinsured with adequate protection against health care expense would be an effective way to help maintain and improve access to care for residents of economically depressed rural areas who lack adequate health insurance coverage. Efforts to place National Health Service Corps physicians in underserved areas of the country should also be continued.
Citation: (CMS Rep. G, A-87; Modified: Sunset Report, I-97; Reaffirmation A-01; Reaffirmed: CMS Rep. 7, A-11

Enhancing Rural Physician Practices H-465.981
The AMA: (1) supports legislation to extend the 10% Medicare payment bonus to physicians practicing in rural counties and other areas where the poverty rate exceeds a certain threshold, regardless of the areas's Health Professional Shortage Area (HPSA) status; (2) encourages federal and state governments to make available low interest loans and other financial assistance to assist physicians with shortage area practices in defraying their costs of compliance with requirements of the Occupational Safety and Health Administration, Americans with Disabilities Act and other national or state regulatory requirements; (3) will explore the feasibility of supporting the legislative and/or regulatory changes necessary to establish a waiver process through which shortage area practices can seek exemption from specific elements of regulatory requirements when improved access, without significant detriment to quality, will result; and (4) supports legislation that would allow shortage area physician practices to qualify as Rural Health Clinics without the need to employ one or more physician extenders.
Citation: CMS Rep. 9, A-96; Reaffirmed: CMS Rep. 8, A-06; Reaffirmed: CMS Rep. 01, A-16

Educational Strategies for Meeting Rural Health Physician Shortage H-465.988
1. In light of the data available from the current literature as well as ongoing studies being conducted by staff, the AMA recommends that:
A. Our AMA encourage medical schools and residency programs to develop educationally sound rural clinical preceptorships and rotations consistent with educational and training requirements, and to provide early and continuing exposure to those programs for medical students and residents.
B. Our AMA encourage medical schools to develop educationally sound primary care residencies in smaller communities with the goal of educating and recruiting more rural physicians.
C. Our AMA encourage state and county medical societies to support state legislative efforts toward developing scholarship and loan programs for future rural physicians.
D. Our AMA encourage state and county medical societies and local medical schools to develop outreach and recruitment programs in rural counties to attract promising high school and college students to medicine and the other health professions.
E. Our AMA urge continued federal and state legislative support for funding of Area Health Education Centers (AHECs) for rural and other underserved areas.
F. Our AMA continue to support full appropriation for the National Health Service Corps Scholarship Program, with the proviso that medical schools serving states with large rural underserved populations have a priority and significant voice in the selection of recipients for those scholarships.
G. Our AMA support full funding of the new federal National Health Service Corps loan repayment program.
H. Our AMA encourage continued legislative support of the research studies being conducted by the Rural Health Research Centers funded by the National Office of Rural Health in the Department of Health and Human Services.
I. Our AMA continue its research investigation into the impact of educational programs on the supply of rural physicians.
J. Our AMA continue to conduct research and monitor other progress in development of educational strategies for alleviating rural physician shortages.
K. Our AMA reaffirm its support for legislation making interest payments on student debt tax deductible.
L. Our AMA encourage state and county medical societies to develop programs to enhance work opportunities and social support systems for spouses of rural practitioners.

2. Our AMA will work with state and specialty societies, medical schools, teaching hospitals, the Accreditation Council for Graduate Medical Education (ACGME), the Centers for Medicare and Medicaid Services (CMS) and other interested stakeholders to identify, encourage and incentivize qualified rural physicians to serve as preceptors and volunteer faculty for rural rotations in residency.
3. Our AMA will: (a) work with interested stakeholders to identify strategies to increase residency training opportunities in rural areas with a report back to the House of Delegates; and (b) work with interested stakeholders to formulate an actionable plan of advocacy with the goal of increasing residency training in rural areas.
Citation: CME Rep. C, I-90; Reaffirmation A-00; Reaffirmation A-01; Reaffirmation I-01; Reaffirmed: CME Rep. 1, I-08; Reaffirmed: CEJA Rep. 06, A-18; Appended: Res. 956, I-18

Rural Health H-465.982
The AMA: (1) encourages state medical associations to study the relevance of managed competition proposals to meeting health care needs of their rural populations; (2) encourages state associations to work with their respective state governments to implement rural health demonstration projects; and (3) will provide all adequate resources to assist state associations in dealing with managed competition in rural areas.
Citation: (CMS Rep. H, A-93; Reaffirmed: CMS Rep. 10, A-03; Reaffirmed: CMS Rep. 4, A-13

Economic Viability of Rural Sole Community Hospitals H-465.979
Our AMA: (1) recognizes that economically viable small rural hospitals are critical to preserving patient access to high-quality care and provider sustainability in rural communities; and (2) supports the efforts of organizations advocating directly on behalf of small rural hospitals provided that the efforts are consistent with AMA policy.
Citation: (CMS Rep. 3, A-15

Closing of Small Rural Hospitals H-465.990
Our AMA encourages legislation to reduce the financial constraints on small rural hospitals in order to improve access to health care.
Citation: (Res. 145, A-90; Reaffirmed: Sunset Report, I-00; Reaffirmed: BOT Rep. 6, A-10: Reaffirmed in lieu of Res. 807, I-13; Reaffirmed: CMS Rep. 3, A-15

AMERICAN MEDICAL ASSOCIATION HOUSE OF DELEGATES

Resolution: 319
(A-19)

Introduced by: Minority Affairs Section

Subject: Adding Pipeline Program Participation Questions to Medical School Applications

Referred to: Reference Committee C
(Nicole Riddle, MD, Chair)

Whereas, The Association of American Medical Colleges (AAMC) reports that enrollment rates among underrepresented minorities remain significantly low despite a rise in total medical student matriculation rates that exceed 21,000 medical students[1]; and

Whereas, All premed pipeline programs struggle to track former participants and whether they enrolled in medical school; and

Whereas, Without accurate data on the effectiveness and influence of premed pipeline programs on medical school enrollment; and

Whereas, 133 out of 141 American medical schools use the AAMC electronic medical school application (AMCAS), offering an unparalleled opportunity to gather data on pipeline program participation in medical school applicants; therefore be it

RESOLVED, That our American Medical Association collaborate with the Association of American Medical Colleges (AAMC) and other stakeholders to coalesce the data to create a question for the AAMC electronic medical school application to allow applicants to identify previous pipeline program participation to determine the effectiveness of pipeline programs those who are underrepresented in medicine in their decisions to pursue careers in medicine (Directive to Take Action); and be it further

RESOLVED, That our AMA develop a plan to analyze the data once this question is implemented with input from key stakeholders, including AAMC, the Accreditation Council for Graduate Medical Education, and interested medical societies and premed pipeline programs. (Directive to Take Action)

Fiscal Note: Modest - between $1,000 - $5,000.

Received: 05/09/19

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[1] https://www.npr.org/2015/10/24/449893318/there-were-fewer-black-men-in-medical-school-in-2014-than-in-1978);

RELEVANT AMA POLICY

Strategies for Enhancing Diversity in the Physician Workforce H-200.951
Our AMA (1) supports increased diversity across all specialties in the physician workforce in the categories of race, ethnicity, gender, sexual orientation/gender identity, socioeconomic origin and persons with disabilities; (2) commends the Institute of Medicine for its report, "In the Nation's Compelling Interest: Ensuring Diversity in the Health Care Workforce," and supports the concept that a racially and ethnically diverse educational experience results in better educational outcomes; and (3) encourages medical schools, health care institutions, managed care and other appropriate groups to develop policies articulating the value and importance of diversity as a goal that benefits all participants, and strategies to accomplish that goal.
Citation: CME Rep. 1, I-06; Reaffirmed: CME Rep. 7, A-08; Reaffirmed: CCB/CLRPD Rep. 4, A-13; Modified: CME Rep. 01, A-16; Reaffirmation A-16

Strategies for Enhancing Diversity in the Physician Workforce D-200.985
1. Our AMA, independently and in collaboration with other groups such as the Association of American Medical Colleges (AAMC), will actively work and advocate for funding at the federal and state levels and in the private sector to support the following: a. Pipeline programs to prepare and motivate members of underrepresented groups to enter medical school; b. Diversity or minority affairs offices at medical schools; c. Financial aid programs for students from groups that are underrepresented in medicine; and d. Financial support programs to recruit and develop faculty members from underrepresented groups.
2. Our AMA will work to obtain full restoration and protection of federal Title VII funding, and similar state funding programs, for the Centers of Excellence Program, Health Careers Opportunity Program, Area Health Education Centers, and other programs that support physician training, recruitment, and retention in geographically-underserved areas.
3. Our AMA will take a leadership role in efforts to enhance diversity in the physician workforce, including engaging in broad-based efforts that involve partners within and beyond the medical profession and medical education community.
4. Our AMA will encourage the Liaison Committee on Medical Education to assure that medical schools demonstrate compliance with its requirements for a diverse student body and faculty.
5. Our AMA will develop an internal education program for its members on the issues and possibilities involved in creating a diverse physician population.
6. Our AMA will provide on-line educational materials for its membership that address diversity issues in patient care including, but not limited to, culture, religion, race and ethnicity.
7. Our AMA will create and support programs that introduce elementary through high school students, especially those from groups that are underrepresented in medicine (URM), to healthcare careers.
8. Our AMA will create and support pipeline programs and encourage support services for URM college students that will support them as they move through college, medical school and residency programs.
9. Our AMA will recommend that medical school admissions committees use holistic assessments of admission applicants that take into account the diversity of preparation and the variety of talents that applicants bring to their education.
10. Our AMA will advocate for the tracking and reporting to interested stakeholders of demographic information pertaining to URM status collected from Electronic Residency Application Service (ERAS) applications through the National Resident Matching Program (NRMP).
11. Our AMA will continue the research, advocacy, collaborative partnerships and other work that was initiated by the Commission to End Health Care Disparities.
12. Our AMA opposes legislation that would undermine institutions' ability to properly employ affirmative action to promote a diverse student population.
Citation: CME Rep. 1, I-06; Reaffirmation I-10; Reaffirmation A-13; Modified: CCB/CLRPD Rep. 2, A-14; Reaffirmation: A-16; Appended: Res. 313, A-17; Appended: Res. 314, A-17; Modified: CME Rep. 01, A-18; Appended: Res. 207, I-18

Diversity in the Physician Workforce and Access to Care D-200.982
Our AMA will: (1) continue to advocate for programs that promote diversity in the US medical workforce, such as pipeline programs to medical schools; (2) continue to advocate for adequate funding for federal and state programs that promote interest in practice in underserved areas, such as those under Title VII of the Public Health Service Act, scholarship and loan repayment programs under the National Health

Services Corps and state programs, state Area Health Education Centers, and Conrad 30, and also encourage the development of a centralized database of scholarship and loan repayment programs; and (3) continue to study the factors that support and those that act against the choice to practice in an underserved area, and report the findings and solutions at the 2008 Interim Meeting.
Citation: CME Rep. 7, A-08; Reaffirmation A-13; Reaffirmation: A-16

Plan for Continued Progress Toward Health Equity H-180.944
Health equity, defined as optimal health for all, is a goal toward which our AMA will work by advocating for health care access, research, and data collection; promoting equity in care; increasing health workforce diversity; influencing determinants of health; and voicing and modeling commitment to health equity.
Citation: BOT Rep. 33, A-18

8.5 Disparities in Health Care
Stereotypes, prejudice, or bias based on gender expectations and other arbitrary evaluations of any individual can manifest in a variety of subtle ways. Differences in treatment that are not directly related to differences in individual patients clinical needs or preferences constitute inappropriate variations in health care. Such variations may contribute to health outcomes that are considerably worse in members of some populations than those of members of majority populations.
This represents a significant challenge for physicians, who ethically are called on to provide the same quality of care to all patients without regard to medically irrelevant personal characteristics.
To fulfill this professional obligation in their individual practices physicians should:
(a) Provide care that meets patient needs and respects patient preferences.
(b) Avoid stereotyping patients.
(c) Examine their own practices to ensure that inappropriate considerations about race, gender identify, sexual orientation, sociodemographic factors, or other nonclinical factors, do not affect clinical judgment.
(d) Work to eliminate biased behavior toward patients by other health care professionals and staff who come into contact with patients.
(e) Encourage shared decision making.
(f) Cultivate effective communication and trust by seeking to better understand factors that can influence patients health care decisions, such as cultural traditions, health beliefs and health literacy, language or other barriers to communication and fears or misperceptions about the health care system.
The medical profession has an ethical responsibility to:
(g) Help increase awareness of health care disparities.
(h) Strive to increase the diversity of the physician workforce as a step toward reducing health care disparities.
(i) Support research that examines health care disparities, including research on the unique health needs of all genders, ethnic groups, and medically disadvantaged populations, and the development of quality measures and resources to help reduce disparities.
AMA Principles of Medical Ethics: I,IV,VII,VIII,IX
The Opinions in this chapter are offered as ethics guidance for physicians and are not intended to establish standards of clinical practice or rules of law.
Issued: 2016

AMERICAN MEDICAL ASSOCIATION HOUSE OF DELEGATES

Resolution: 320
(A-19)

Introduced by: Michigan

Subject: Opioid Education in Medical Schools

Referred to: Reference Committee C
(Nicole Riddle, MD, Chair)

Whereas, Opioids are attributed to over 47,000 overdose deaths in 2017 according to the Centers for Disease Control and Prevention; and

Whereas, Approximately 130 Americans die every day from an opioid overdose, culminating in nearly 48,000 drug overdose deaths involving an opioid in 2017; and

Whereas, Being the primary source of legally prescribed controlled substances, it is the responsibility of physicians to learn safe, optimal prescribing practices for opioids; and

Whereas, Health professionals, attendings and residents included, often lack the confidence and preparation to approach complex patients who are taking opioids for chronic pain; and

Whereas, It has been shown that some medical school curricula may not adequately spend substantial time covering addiction medicine, or lack emphasis on the complexity of opioid substance use disorder; and

Whereas, There is no current standardized curriculum regarding addiction and drug overdose patient care for Medical Schools; and

Whereas, Prior training initiatives in Medical Schools regarding substance abuse disorders have correlated with significant improvements in students' attitudes, beliefs in role responsibility, and confidence in skills during preclinical years; and

Whereas, The Association of American Medical Colleges created a statement that 74 medical schools signed in order to demonstrate their willingness toward better incorporating opioid-related topics in their training of medical students; and

Whereas, There have been successful implementation of interprofessional education workshops in medical schools that simulate the complex issues of substance use disorder while highlighting the importance of collaborative teamwork; and

Whereas, An eight-hour medication-assisted treatment (MAT) waiver training for medical students is offered by the Providers Clinical Support System, a program funded by the Substance Abuse and Mental Health Services Administration; and

Whereas, Medical schools can partner with the American Society of Addiction Medicine to implement an eight-hour MAT waiver training course for medical students; and

Whereas, The usage of simulated patients and Objective Structured Clinical Exam (OSCE) has shown to increase interviewing and intervention skills, and improve assessment and management skills regarding alcohol and illicit drug abuse; and

Whereas, Studies have shown that up to 50 percent of primary care physicians did not address patients substance abuse, with 40 percent of physicians missed diagnosing a substance use disorder; and

Whereas, Only three percent of primary care physicians in rural areas have received waivers to prescribe buprenorphine to treat opioid use disorder; therefore be it

RESOLVED, That our American Medical Association work with the Liaison Committee on Medical Education to include formalized opioid and related substance use disorder training using an evidence-based multidisciplinary approach in the curriculum of accredited medical schools. (New HOD Policy)

Fiscal Note: Modest - between $1,000 - $5,000.

Received: 05/09/19

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RELEVANT AMA POLICY

Education and Awareness of Opioid Pain Management Treatments, Including Responsible Use of Methadone D-120.985
1. Our AMA will incorporate into its web site a directory consolidating available information on the safe and effective use of opioid analgesics in clinical practice.
2. Our AMA, in collaboration with Federation partners, will collate and disseminate available educational and training resources on the use of methadone for pain management.
3.Our AMA will work in conjunction with the Association of American Medical Colleges, American Osteopathic Association, Commission on Osteopathic College Accreditation, Accreditation Council for Graduate Medical Education, and other interested professional organizations to develop opioid education resources for medical students, physicians in training, and practicing physicians.
Citation: Sub. Res. 508, A-03; Reaffirmed: CSAPH Rep. 1, A-13; Appended: Res. 515, A-14; Reaffirmed: BOT Rep. 14, A-15; Appended: Res. 311, A-18

Improving Residency Training in the Treatment of Opioid Dependence H-310.906
Our AMA: (1) encourages the expansion of residency and fellowship training opportunities to provide clinical experience in the treatment of opioid use disorders, under the supervision of an appropriately trained physician; and (2) supports additional funding to overcome the financial barriers that exist for trainees seeking clinical experience in the treatment of opioid use disorders.
Citation: Res. 301, I-16

Improving Medical Practice and Patient/Family Education to Reverse the Epidemic of Nonmedical Prescription Drug Use and Addiction D-95.981
1. Our AMA:
a. will collaborate with relevant medical specialty societies to develop continuing medical education curricula aimed at reducing the epidemic of misuse of and addiction to prescription controlled substances, especially by youth;
b. encourages medical specialty societies to develop practice guidelines and performance measures that would increase the likelihood of safe and effective clinical use of prescription controlled substances, especially psychostimulants, benzodiazepines and benzodiazepines receptor agonists, and opioid analgesics;
c. encourages physicians to become aware of resources on the nonmedical use of prescription controlled substances that can assist in actively engaging patients, and especially parents, on the benefits and risks of such treatment, and the need to safeguard and monitor prescriptions for controlled substances, with the intent of reducing access and diversion by family members and friends;
d. will consult with relevant agencies on potential strategies to actively involve physicians in being ?a part of the solution? to the epidemic of unauthorized/nonmedical use of prescription controlled substances; and
e. supports research on: (i) firmly identifying sources of diverted prescription controlled substances so that solutions can be advanced; and (ii) issues relevant to the long-term use of prescription controlled substances.
2. Our AMA, in conjunction with other Federation members, key public and private stakeholders, and pharmaceutical manufacturers, will pursue and intensify collaborative efforts involving a public health approach in order to:
a. reduce harm from the inappropriate use, misuse and diversion of controlled substances, including opioid analgesics and other potentially addictive medications;
b. increase awareness that substance use disorders are chronic diseases and must be treated accordingly; and
c. reduce the stigma associated with patients suffering from persistent pain and/or substance use disorders, including addiction.
Citation: (CSAPH Rep. 2, I-08; Appended: Res. 517, A-15; Reaffirmed: BOT Rep. 5, I-15

Promotion of Better Pain Care D-160.981
1. Our AMA: (a) will express its strong commitment to better access and delivery of quality pain care through the promotion of enhanced research, education and clinical practice in the field of pain medicine; and (b) encourages relevant specialties to collaborate in studying the following: (i) the scope of practice and body of knowledge encompassed by the field of pain medicine; (ii) the adequacy of undergraduate,

graduate and post graduate education in the principles and practice of the field of pain medicine, considering the current and anticipated medical need for the delivery of quality pain care; (iii) appropriate training and credentialing criteria for this multidisciplinary field of medical practice; and (iv) convening a meeting of interested parties to review all pertinent matters scientific and socioeconomic.
2. Our AMA encourages relevant stakeholders to research the overall effects of opioid production cuts.
3. Our AMA strongly urges the US Drug Enforcement Administration to base any future reductions in aggregate production quotas for opioids on actual data from multiple sources, including prescribing data, and to proactively monitor opioid quotas and supply to prevent any shortages that might develop and to take immediate action to correct any shortages.
4. Our AMA encourages the US Drug Enforcement Administration to be more transparent when developing medication production guidelines.
5. Our AMA and the physician community reaffirm their commitment to delivering compassionate and ethical pain management, promoting safe opioid prescribing, reducing opioid-related harm and the diversion of controlled substances, improving access to treatment for substance use disorders, and fostering a public health based-approach to addressing opioid-related morbidity and mortality.
Citation: Res. 321, A-08; Appended: Res. 522, A-10; Reaffirmed in lieu of Res. 518, A-12; Reaffirmed: BOT Rep. 19, A-16; Reaffirmed in lieu of Res. 117, A-16; Appended: Res. 927, I-16; Appended: Res. 526, A-17; Modified: BOT Action in response to referred for decision Res. 927, I-16; Reaffirmed: Res. 235, I-18; Reaffirmed in lieu of: Res. 228, I-18

AMERICAN MEDICAL ASSOCIATION HOUSE OF DELEGATES

Resolution: 321
(A-19)

Introduced by: Michigan, North Carolina

Subject: Physician Health Program Accountability, Consistency, and Excellence in Provision of Service to the Medical Profession

Referred to: Reference Committee C
(Nicole Riddle, MD, Chair)

Whereas, A Physician Health Program is defined as a “confidential resource for physicians, other licensed health care professionals, or those in training suffering from addictive, psychiatric, medical, behavioral or other potentially impairing conditions;” and

Whereas, The Physician Health Program (PHP) model represents a system in which physicians with potentially impairing conditions who come forward or are referred are given the opportunity for evaluation, rehabilitation, treatment and monitoring without disciplinary action in an anonymous, confidential and respectful manner; and

Whereas, Ideally, the PHP model is committed to the early identification, evaluation, treatment, monitoring, and earned advocacy, when appropriate, of licensees with potentially impairing qualifying illness(es) prior to the progression to impairment in the workplace; and

Whereas, The PHP model enables effective clinical care for mental, physical and substance abuse disorders, easy access to a variety of clinical interventions and support for those seeking help, including hospitals, families, communities, licensure boards and other components of society and organized medicine; and

Whereas, PHPs, organized medicine, and the respective regulatory entities should work together to advance the principles of collaboration, communication, accountability and transparency to achieve a shared vision of ensuring the health their mutual constituencies while simultaneously ensuring the safety and welfare of patients; and

Whereas, Considering the high costs of recruitment and training, the PHP model can save organizations significant resources for each physician or physician assistant who is retained in, or returned to, practice as the operation of the program, and rehabilitation of health care professionals is more cost effective than the training of new health care professionals; and

Whereas, PHPs operate in 47 states and the District of Columbia; and

Whereas, Physicians can be referred to a PHP by their employer, a colleague, a family member, or even themselves; and

Whereas, PHPs were created with the intention to provide a confidential pathway to rehabilitate and monitor physicians with mental illness, substance use disorders, and other potentially impairing conditions so that they may return safely to the practice of medicine; and

Whereas, In order to earn the confidence, respect, and trust of those they serve, PHPs must be committed to having open lines of communication between all parties involved in carrying out its mission, as well as honest, direct and professional interactions aimed toward common interests; and

Whereas, PHPs must report to the state licensing board any physician suffering from serious psychiatric illness, drug or alcohol use disorders, or any condition it deems to be currently impairing and may place the public at risk if said physician refuses their recommendation for treatment and subsequent disease management; and

Whereas, The Federation of State Medical Boards called for PHPs to develop performance reviews of their programs that demonstrate an ongoing track record of ensuring safety to the public and to reveal deficiencies if they occur, and thus ensure soundness and fairness of practice; and

Whereas, The Federation of State Physician Health Programs (FSPHP) has the stated mission of supporting physician health programs in improving the health of medical professionals, thereby contributing to quality patient care; and

Whereas, The FSPHP strengthens PHPs by promoting best practices and providing guidelines, advocacy, and other resources that enhance their effectiveness. The FSPHP encourages partnerships between physician health programs, regulatory boards, and other appropriate components of organized medicine; and

Whereas, The FSPHP fosters collaboration and engagement with other national and international medical organizations; and

Whereas, The FSPHP opposes discrimination against physicians and the medical community solely based on the presence of a particular diagnosis or other discriminatory factors and supports the use of PHP services in lieu of disciplinary action whenever possible; and

Whereas, The FSPHP supports education and research designed to establish best practices for the prevention, treatment, and monitoring of physicians experiencing substance use disorders, mental illness, physical illness, and other potentially impairing conditions; and

Whereas, The FSPHP's guidelines and philosophy are consistent with the American Medical Association (AMA) Physician Health Program Model ACT https://www.fsphp.org/assets/docs/ama_physicians_health_programs_act_-_2016.pdf; and

Whereas, The FSPHP is currently developing the Performance *Enhancement and Effectiveness Review* (PEER™) program to improve accountability, consistency, and excellence among state PHPs; and

Whereas, The AMA, the American Psychiatric Association, the Accreditation Council of Graduate Medical Education, the American Board of Medical Specialties, the American Osteopathic Association, the American College of Physicians and the FSMB have all sponsored the FSPHP PEER™ process via philosophical, financial, and stated support that reflect a

commitment to further the development of these important programs while at the same time set the stage for appropriate funding for this venture; therefore be it

RESOLVED, That our American Medical Association amend policy D-405.990, "Educating Physicians About Physician Health Programs," by addition to read as follows:

Educating Physicians About Physician Health Programs and Advocating for Standards D-405.990
1) Our AMA will work closely with the Federation of State Physician Health Programs (FSPHP) to educate our members as to the availability and services of state physician health programs to continue to create opportunities to help ensure physicians and medical students are fully knowledgeable about the purpose of physician health programs and the relationship that exists between the physician health program and the licensing authority in their state or territory; 2) Our AMA will continue to collaborate with relevant organizations on activities that address physician health and wellness; 3) Our AMA will, in conjunction with the FSPHP, develop state legislative guidelines addressing the design and implementation of physician health programs; ~~and~~ 4) Our AMA will work with FSPHP to develop messaging for all Federation members to consider regarding elimination of stigmatization of mental illness and illness in general in physicians and physicians in training; and 5) Our AMA will continue to work with and support FSPHP efforts already underway to design and implement the physician health program review process, Performance Enhancement and Effectiveness Review (PEER™), to improve accountability, consistency and excellence among its state member PHPs. The AMA will partner with the FSPHP to help advocate for additional national sponsors for this project; 6) Our AMA will continue to work with the FSPHP and other appropriate stakeholders on issues of affordability, cost effectiveness, and diversity of treatment options. (Modify Current HOD Policy)

Fiscal Note: Minimal - less than $1,000.

Received: 05/09/19

RELEVANT AMA POLICY

Educating Physicians About Physician Health Programs D-405.990
1) Our AMA will work closely with the Federation of State Physician Health Programs (FSPHP) to educate our members as to the availability and services of state physician health programs to continue to create opportunities to help ensure physicians and medical students are fully knowledgeable about the purpose of physician health programs and the relationship that exists between the physician health program and the licensing authority in their state or territory; 2) Our AMA will continue to collaborate with relevant organizations on activities that address physician health and wellness; 3) Our AMA will, in conjunction with the FSPHP, develop state legislative guidelines addressing the design and implementation of physician health programs; and 4) Our AMA will work with FSPHP to develop messaging for all Federation members to consider regarding elimination of stigmatization of mental illness and illness in general in physicians and physicians in training.
Citation: (Res. 402, A-09; Modified: CSAPH Rep. 2, A-11; Reaffirmed in lieu of Res. 412, A-12; Appended: BOT action in response to referred for decision Res. 403, A-12

Impaired Physicians Practice Act H-275.964
Our AMA encourages state medical societies that do not have effectively functioning impaired physicians programs to improve their programs and to urge their states to adopt the AMA 1985 Model Impaired Physician Treatment Act, as necessary.
Citation: (Sub. Res. 7, A-89; Reaffirmed: BOT Action in response to referred for decision Res. 215, I-97; Reaffirmed: BOT Rep. 17, I-99; Reaffirmed: Sunset Report, A-00; Reaffirmed: CSAPH Rep. 1, A-10

Confidentiality of Enrollment in Physicians (Professional) Health Programs D-405.984
1. Our American Medical Association will work with other medical professional organizations, the Federation of State Medical Boards, the American Board of Medical Specialties, and the Federation of State Physician Health Programs, to seek and/or support rules and regulations or legislation to provide for confidentiality of fully compliant participants in physician (and similar) health programs or their recovery programs in responding to questions on medical practice or licensure applications.
2. Our AMA will work with The Joint Commission, national hospital associations, national health insurer organizations, and the Centers for Medicare and Medicaid Services to avoid questions on their applications that would jeopardize the confidentiality of applicants who are compliant with treatment within professional health programs and who do not constitute a current threat to the care of themselves or their patients.
Citation: (Res. 4, A-15

AMERICAN MEDICAL ASSOCIATION HOUSE OF DELEGATES

Resolution: 322
(A-19)

Introduced by: Medical Student Section

Subject: Support for the Study of the Timing and Causes for Leave of Absence and Withdrawal from United States Medical Schools

Referred to: Reference Committee C
(Nicole Riddle, MD, Chair)

Whereas, The 8-year graduation rate of U.S allopathic medical students who were not in dual-degree programs was 97.5% for those who matriculated from 2001 to 2010[1]; and

Whereas, Among these students, those who took leaves of absence for reasons other than pursuing a dual degree or for research, the 8-year graduation rate dropped to 69.0–70.4%[1;] and

Whereas, A study of medical students in the state of Michigan found that underrepresented minority students had double the rate of attrition compared to non-underrepresented students, but did not identify causes for the discrepancy[2]; and,

Whereas, Studies in England and Ireland have identified time-points in their curriculum at which British and Irish medical students are most likely to withdraw[3,4]; and

Whereas, PubMed, JSTOR, Google Scholar, and Academic Search Complete searches on September 23, 2018 failed to identify the points in time during medical training that students at United States medical schools were most likely to take a leave of absence, nor their reasons for doing so[5-8]; and

Whereas, Standard 11 of the Liaison Committee on Medical Education defines the function of a medical school to provide “effective academic support and career advising to all medical students to assist them in achieving their career goals” [9]; and

Whereas, Current AMA policy states that, “Adequate and timely career counseling should be available at all medical schools”[10;] and

Whereas, Knowing the points in time and reasons for which medical students in the United States are most likely to take a leave of absence or withdraw, may assist academic institutions in planning curricular or advising interventions; therefore be it

RESOLVED, That our American Medical Association support the study of factors surrounding leaves of absence and withdrawal from allopathic and osteopathic medical education programs, including the timing of and reasons for these actions, as well as the sociodemographic information of the students involved. (New HOD Policy)

Fiscal Note: Minimal - less than $1,000.

Received: 05/09/19

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1. Graduation Rates and Attrition Factors for U.S. Medical School Students. AAMC Analysis in Brief. 2014;14(5).
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9. Liaison Committee on Medical Education. Functions and Structure of a Medical School. March 2017. http://lcme.org/publications/ Accessed September 23, 2018.
10. AMA Policy H-295.895 Progress in Medical Education: Structuring the Fourth Year of Medical School

RELEVANT AMA POLICY

Progress in Medical Education: Structuring the Fourth Year of Medical School H-295.895
It is the policy of the AMA that: (1) Trends toward increasing structure in the fourth year of medical school should be balanced by the need to preserve opportunities for students to engage in elective clinical and other educationally appropriate experiences.
(2) The third and fourth years as a continuum should provide students with a broad clinical education that prepares them for entry into residency training.
(3) There should be a comprehensive assessment of clinical skills administered at a time when the results can be used to plan each student's fourth-year program, so as to remedy deficiencies and broaden clinical knowledge.
(4) Medical schools should develop policies and procedures to ensure that medical students receive counseling to assist them in their choice of electives.
(5) Adequate and timely career counseling should be available at all medical schools.
(6) The ability of medical students to choose electives based on interest or perceived academic need should not be compromised by the residency selection process. The American Medical Association should work with the Association of American Medical Colleges, medical schools, and residency program directors groups to discourage the practice of excessive audition electives.
(7) Our AMA should continue to work with relevant groups to study the transition from the third and fourth years of medical school to residency training, with the goal of ensuring that a continuum exists in the acquisition of clinical knowledge and skills.
Citation: CME Rep. 1, I-98; Reaffirmed: CME Rep. 9, A-07; Reaffirmed: CME Rep. 01, A-17

For-Profit Medical Schools or Colleges D-305.954
Our AMA will study issues related to medical education programs offered at for-profit versus not-for-profit medical schools, to include the: (a) attrition rate of students; (b) financial burden of non-graduates versus graduates; (c) success of graduates in obtaining a residency position; and (d) level of support for graduate medical education; and report back at the 2019 Annual Meeting.
Citation: Res. 302, A-18

The Preservation, Stability and Expansion of Full Funding for Graduate Medical Education D-305.967
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 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.
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 and 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.
21. Our AMA will 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.
22. Our AMA will 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 support the value of GME to the nation.
23. Our AMA supports 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.
24. Our AMA will explore various models of all-payer funding for GME, especially as the Institute of Medicine (now a program unit of the National Academy of Medicine) did not examine those options in its 2014 report on GME governance and financing.
25. Our AMA encourages organizations with successful existing models to publicize and share strategies, outcomes and costs.
26. Our AMA encourages insurance payers and foundations to enter into partnerships with state and local agencies as well as academic medical centers and community hospitals seeking to expand GME.
27. Our AMA will develop, along with other interested stakeholders, a national campaign to educate the public on the definition and importance of graduate medical education, student debt and the state of the medical profession today and in the future.
28. Our AMA will collaborate with other stakeholder organizations to evaluate and work to establish consensus regarding the appropriate economic value of resident and fellow services.
29. Our AMA will monitor ongoing pilots and demonstration projects, and explore the feasibility of broader implementation of proposals that show promise as alternative means for funding physician education and training while providing appropriate compensation for residents and fellows.
30. Our AMA will monitor the status of the House Energy and Commerce Committee's response to public comments solicited regarding the 2014 IOM report, Graduate Medical Education That Meets the Nation's Health Needs, as well as results of ongoing studies, including that requested of the GAO, in order to formulate new advocacy strategy for GME funding, and will report back to the House of Delegates regularly on important changes in the landscape of GME funding.
31. Our AMA will advocate to the Centers for Medicare & Medicaid Services for flexibility beyond the current maximum of five years for the Medicare graduate medical education cap-setting deadline for new residency programs in underserved areas and/or economically depressed areas.
32. Our AMA will: (a) encourage all existing and planned allopathic and osteopathic medical schools to thoroughly research match statistics and other career placement metrics when developing career guidance plans; (b) strongly advocate for and work with legislators, private sector partnerships, and existing and planned osteopathic and allopathic medical schools to create and fund graduate medical education (GME) programs that can accommodate the equivalent number of additional medical school graduates consistent with the workforce needs of our nation; and (c) encourage the Liaison Committee on Medical Education (LCME), the Commission on Osteopathic College Accreditation (COCA), and other accrediting bodies, as part of accreditation of allopathic and osteopathic medical schools, to prospectively and retrospectively monitor medical school graduates' rates of placement into GME as well as GME completion.
33. Our AMA will investigate the status of implementation of AMA Policies D-305.973, "Proposed Revisions to AMA Policy on the Financing of Medical Education Programs" and D-305.967, "The Preservation, Stability and Expansion of Full Funding for Graduate Medical Education" and report back to the House of Delegates with proposed measures to resolve the problems of underfunding, inadequate number of residencies and geographic maldistribution of residencies.
Citation: 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; Modified: CME Rep. 9, A-15; Appended: CME Rep, 1, I-15; Appended: Res. 902, I-15; Reaffirmed: CME Rep. 3, A-16; Appended: Res. 320, A-16; Appended: CME Rep. 04, A-16; Appended: CME Rep. 05, A-16; Reaffirmation A-16; Appended: Res. 323, A-17; Appended: CME Rep. 03, A-18; Appended: Res. 319, A-18; Reaffirmed in lieu of: Res. 960, I-18

Recommendations for Future Directions for Medical Education H-295.995
Our AMA supports the following recommendations relating to the future directions for medical education:
(1) The medical profession and those responsible for medical education should strengthen the general or broad components of both undergraduate and graduate medical education. All medical students and resident physicians should have general knowledge of the whole field of medicine regardless of their projected choice of specialty.
(2) Schools of medicine should accept the principle and should state in their requirements for admission that a broad cultural education in the arts, humanities, and social sciences, as well as in the biological and physical sciences, is desirable.
(3) Medical schools should make their goals and objectives known to prospective students and premedical counselors in order that applicants may apply to medical schools whose programs are most in accord with their career goals.
(4) Medical schools should state explicitly in publications their admission requirements and the methods they employ in the selection of students.
(5) Medical schools should require their admissions committees to make every effort to determine that the students admitted possess integrity as well as the ability to acquire the knowledge and skills required of a physician.
(6) Although the results of standardized admission testing may be an important predictor of the ability of students to complete courses in the preclinical sciences successfully, medical schools should utilize such tests as only one of several criteria for the selection of students. Continuing review of admission tests is encouraged because the subject content of such examinations has an influence on premedical education and counseling.
(7) Medical schools should improve their liaison with college counselors so that potential medical students can be given early and effective advice. The resources of regional and national organizations can be useful in developing this communication.
(8) Medical schools are chartered for the unique purpose of educating students to become physicians and should not assume obligations that would significantly compromise this purpose.
(9) Medical schools should inform the public that, although they have a unique capability to identify the changing medical needs of society and to propose responses to them, they are only one of the elements of society that may be involved in responding. Medical schools should continue to identify social problems related to health and should continue to recommend solutions.
(10) Medical school faculties should continue to exercise prudent judgment in adjusting educational programs in response to social change and societal needs.
(11) Faculties should continue to evaluate curricula periodically as a means of insuring that graduates will have the capability to recognize the diverse nature of disease, and the potential to provide preventive and comprehensive medical care. Medical schools, within the framework of their respective institutional goals and regardless of the organizational structure of the faculty, should provide a broad general education in both basic sciences and the art and science of clinical medicine.
(12) The curriculum of a medical school should be designed to provide students with experience in clinical medicine ranging from primary to tertiary care in a variety of inpatient and outpatient settings, such as university hospitals, community hospitals, and other health care facilities. Medical schools should establish standards and apply them to all components of the clinical educational program regardless of where they are conducted. Regular evaluation of the quality of each experience and its contribution to the total program should be conducted.
(13) Faculties of medical schools have the responsibility to evaluate the cognitive abilities of their students. Extramural examinations may be used for this purpose, but never as the sole criterion for promotion or graduation of a student.
(14) As part of the responsibility for granting the MD degree, faculties of medical schools have the obligation to evaluate as thoroughly as possible the non-cognitive abilities of their medical students.
(15) Medical schools and residency programs should continue to recognize that the instruction provided by volunteer and part-time members of the faculty and the use of facilities in which they practice make

important contributions to the education of medical students and resident physicians. Development of means by which the volunteer and part-time faculty can express their professional viewpoints regarding the educational environment and curriculum should be encouraged.
(16) Each medical school should establish, or review already established, criteria for the initial appointment, continuation of appointment, and promotion of all categories of faculty. Regular evaluation of the contribution of all faculty members should be conducted in accordance with institutional policy and practice.
(17a) Faculties of medical schools should reevaluate the current elements of their fourth or final year with the intent of increasing the breadth of clinical experience through a more formal structure and improved faculty counseling. An appropriate number of electives or selected options should be included. (17b) Counseling of medical students by faculty and others should be directed toward increasing the breadth of clinical experience. Students should be encouraged to choose experience in disciplines that will not be an integral part of their projected graduate medical education.
(18) Directors of residency programs should not permit medical students to make commitments to a residency program prior to the final year of medical school.
(19) The first year of postdoctoral medical education for all graduates should consist of a broad year of general training. (a) For physicians entering residencies in internal medicine, pediatrics, and general surgery, postdoctoral medical education should include at least four months of training in a specialty or specialties other than the one in which the resident has been appointed. (A residency in family practice provides a broad education in medicine because it includes training in several fields.) (b) For physicians entering residencies in specialties other than internal medicine, pediatrics, general surgery, and family practice, the first postdoctoral year of medical education should be devoted to one of the four above-named specialties or to a program following the general requirements of a transitional year stipulated in the "General Requirements" section of the "Essentials of Accredited Residencies." (c) A program for the transitional year should be planned, designed, administered, conducted, and evaluated as an entity by the sponsoring institution rather than one or more departments. Responsibility for the executive direction of the program should be assigned to one physician whose responsibility is the administration of the program. Educational programs for a transitional year should be subjected to thorough surveillance by the appropriate accrediting body as a means of assuring that the content, conduct, and internal evaluation of the educational program conform to national standards. The impact of the transitional year should not be deleterious to the educational programs of the specialty disciplines.
(20) The ACGME, individual specialty boards, and respective residency review committees should improve communication with directors of residency programs because of their shared responsibility for programs in graduate medical education.
(21) Specialty boards should be aware of and concerned with the impact that the requirements for certification and the content of the examination have upon the content and structure of graduate medical education. Requirements for certification should not be so specific that they inhibit program directors from exercising judgment and flexibility in the design and operation of their programs.
(22) An essential goal of a specialty board should be to determine that the standards that it has set for certification continue to assure that successful candidates possess the knowledge, skills, and the commitment to upgrade continually the quality of medical care.
(23) Specialty boards should endeavor to develop a consensus concerning the significance of certification by specialty and publicize it so that the purposes and limitations of certification can be clearly understood by the profession and the public.
(24) The importance of certification by specialty boards requires that communication be improved between the specialty boards and the medical profession as a whole, particularly between the boards and their sponsoring, nominating, or constituent organizations and also between the boards and their diplomates.
(25) Specialty boards should consider having members of the public participate in appropriate board activities.
(26) Specialty boards should consider having physicians and other professionals from related disciplines participate in board activities.
(27) The AMA recommends to state licensing authorities that they require individual applicants, to be eligible to be licensed to practice medicine, to possess the degree of Doctor of Medicine or its equivalent from a school or program that meets the standards of the LCME or accredited by the American Osteopathic Association, or to demonstrate as individuals, comparable academic and personal achievements. All applicants for full and unrestricted licensure should provide evidence of the satisfactory completion of at least one year of an accredited program of graduate medical education in the US.

Satisfactory completion should be based upon an assessment of the applicant's knowledge, problem-solving ability, and clinical skills in the general field of medicine. The AMA recommends to legislatures and governmental regulatory authorities that they not impose requirements for licensure that are so specific that they restrict the responsibility of medical educators to determine the content of undergraduate and graduate medical education.
(28) The medical profession should continue to encourage participation in continuing medical education related to the physician's professional needs and activities. Efforts to evaluate the effectiveness of such education should be continued.
(29) The medical profession and the public should recognize the difficulties related to an objective and valid assessment of clinical performance. Research efforts to improve existing methods of evaluation and to develop new methods having an acceptable degree of reliability and validity should be supported.
(30) Methods currently being used to evaluate the readiness of graduates of foreign medical schools to enter accredited programs in graduate medical education in this country should be critically reviewed and modified as necessary. No graduate of any medical school should be admitted to or continued in a residency program if his or her participation can reasonably be expected to affect adversely the quality of patient care or to jeopardize the quality of the educational experiences of other residents or of students in educational programs within the hospital.
(31) The Educational Commission for Foreign Medical Graduates should be encouraged to study the feasibility of including in its procedures for certification of graduates of foreign medical schools a period of observation adequate for the evaluation of clinical skills and the application of knowledge to clinical problems.
(32) The AMA, in cooperation with others, supports continued efforts to review and define standards for medical education at all levels. The AMA supports continued participation in the evaluation and accreditation of medical education at all levels.
(33) The AMA, when appropriate, supports the use of selected consultants from the public and from the professions for consideration of special issues related to medical education.
(34) The AMA encourages entities that profile physicians to provide them with feedback on their performance and with access to education to assist them in meeting norms of practice; and supports the creation of experiences across the continuum of medical education designed to teach about the process of physician profiling and about the principles of utilization review/quality assurance.
(35) Our AMA encourages the accrediting bodies for MD- and DO-granting medical schools to review, on an ongoing basis, their accreditation standards to assure that they protect the quality and integrity of medical education in the context of the emergence of new models of medical school organization and governance.
(36) Our AMA will strongly advocate for the rights of medical students, residents, and fellows to have physician-led (MD or DO as defined by the AMA) clinical training, supervision, and evaluation while recognizing the contribution of non-physicians to medical education.
(37) Our AMA will publicize to medical students, residents, and fellows their rights, as per Liaison Committee on Medical Education and Accreditation Council for Graduate Medical Education guidelines, to physician-led education and a means to report violations without fear of retaliation.
Citation: CME Rep. B, A-82; Amended: CLRPD Rep. A, I-92; Res. 331, I-95; Reaffirmed by Res. 322, A-97; Reaffirmation I-03; Modified: CME Rep. 7, A-05; Modified: CME Rep. 2, I-05; Appended: CME Rep. 5, A-11; Reaffirmed: CME Rep. 3, A-11; Modified: CME Rep. 01, I-17; Appended: Res. 961, I-18

Improving Mental Health Services for Undergraduate and Graduate Students H-345.970
Our AMA supports: (1) strategies that emphasize de-stigmatization and enable timely and affordable access to mental health services for undergraduate and graduate students, in order to improve the provision of care and increase its use by those in need; (2) colleges and universities in emphasizing to undergraduate and graduate students and parents the importance, availability, and efficacy of mental health resources; and (3) collaborations of university mental health specialists and local public or private practices and/or health centers in order to provide a larger pool of resources, such that any student is able to access care in a timely and affordable manner.
Citation: Res. 904, I-16