REPORTS OF THE COUNCIL ON MEDICAL EDUCATION

The following reports were presented by John P. Williams, MD, Chair:

1. COUNCIL ON MEDICAL EDUCATION SUNSET REVIEW OF 2013 HOUSE OF DELEGATES' POLICIES

Reference committee hearing: see report of Reference Committee C.

HOUSE ACTION: RECOMMENDATIONS ADOPTED
REMAINDER OF REPORT FILED

Policy G-600.110, "Sunset Mechanism for AMA Policy," calls for the decennial review of American Medical Association (AMA) policies to ensure that our AMA's policy database is current, coherent, and relevant:

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to the HOD or resolution to sunset a policy earlier than its 10-year horizon if it is no longer relevant, has been superseded by a more current policy, or has been accomplished.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.

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)

APPENDIX - RECOMMENDED ACTIONS

Policy Number	Title	Text	Recommendation
D-295.960	Clinical Skills Training in Medical Schools	Our AMA: (1) encourages medical schools to reevaluate their educational programs to ensure appropriate emphasis of clinical skills training in medical schools; (2) encourages medical schools to include longitudinal clinical experiences for students during the "preclinical" years of medical education; (3) will evaluate the cost/value equation, benefits, and consequences of the implementation of standardized clinical exams as a step for licensure, along with the barriers to more meaningful examination feedback for both examinees and US medical schools, and provide recommendations based on these findings; and (4) will evaluate the consequences of the January 2013 changes to the USMLE Step II Clinical Skills exam and their implications for US medical students and international medical graduates. (Res. 324, A-03; Appended: Res. 309, A-11; Appended: Res. 904, I-13)	Retain clause 2, which is still relevant and not superseded by other AMA policy, and sunset clauses 1, 3, and 4, to read as follows: "Our AMA~~: (1) encourages medical schools to reevaluate their educational programs to ensure appropriate emphasis of clinical skills training in medical schools; (2)~~ encourages medical schools to include longitudinal clinical experiences for students during the "preclinical" years of medical education~~; (3) will evaluate the cost/value equation, benefits, and consequences of the implementation of standardized clinical exams as a step for licensure, along with the barriers to more meaningful examination feedback for both examinees and US medical schools, and provide recommendations based on these findings; and (4) will evaluate the consequences of the January 2013 changes to the USMLE Step II Clinical Skills exam and their implications for US medical students and international medical graduates~~." The contents of clause 1 are required of medical school programs with accreditation from the Liaison Committee on Medical Education (LCME) and is reviewed periodically, and are reflected in H-295.995 (12) (17a) (17b), "Recommendations for Future Directions for Medical Education," which read: "(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." "(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." Clauses 3 and 4 have been accomplished and are reflected in other AMA policy, such as D-295.988, "Clinical Skills Assessment During Medical School," which reads in part: "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. . . . "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."
D-295.982	Model Pain Management Program For Medical School Curricula	Our AMA will collect, synthesize, and disseminate information about effective educational programs in pain management and palliative care in medical schools and residency programs. (Res. 308, A-01; Reaffirmed: CME Rep. 2, A-11; Reaffirmed: CME Rep. 6, A-13)	Sunset; this directive has been accomplished.
D-300.999	Registration of Accredited CME Sponsors	1. Our AMA will continue cooperative efforts to assure that accredited sponsors of continuing medical education adhere to AMA Physician's Recognition Award (PRA) policy when designating AMA PRA credit. 2. Our AMA will remind all accredited CME providers of their responsibility, as stated in the AMA PRA requirements, to provide documentation to participating physicians of the credit awarded at the request of the physician. (CME Rep. 4, A-00; Reaffirmed: CME Rep. 2, A-10; Appended: CME Rep. 7, A-13)	Retain clause 1. Still relevant. Sunset clause 2. Accomplished though the publication of the PRA booklet in 2017. New version to read as follows: "~~1.~~ Our AMA will continue cooperative efforts to assure that accredited sponsors of continuing medical education adhere to AMA Physician's Recognition Award (PRA) policy when designating AMA PRA credit. ~~2. Our AMA will remind all accredited CME providers of their responsibility, as stated in the AMA PRA requirements, to provide documentation to participating physicians of the credit awarded at the request of the physician.~~"
D-305.960	Loan Repayment for Physicians in State Designated Shortage Areas	Our AMA: (1) will educate membership about various opportunities surrounding loan repayment through mechanisms including but not limited to: a designated state contact, web resources, and informative meetings, so that residents can make an informed decision regarding employment; (2) will advocate equal tax benefits for physicians who practice in either state-designated or federally-designated shortage areas; and (3) acknowledges and continues to support initiatives that facilitate recruitment of physicians to designated shortage areas. (Res. 328, A-09; Reaffirmation A-13)	Sunset; still relevant, but superseded by and reflected in other AMA policy, such as H-305.925, "Principles of and Actions to Address Medical Education Costs and Student Debt" and H-200.949 (16), "Principles of and Actions to Address Primary Care Workforce."
D-305.973	Proposed Revisions to AMA Policy on the Financing of	Our AMA will work with: (1) the federal government, including the Centers for Medicare and Medicaid Services, and the	Retain; still relevant, with name change as shown below:

	Medical Education Programs	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)	~~Proposed Revisions to AMA Policy on the~~ Financing of Medical Education Programs
D-305.986	Recognizing Spouse and	Our AMA will: (1) work with the Liaison Committee on Medical	Sunset. The LCME does not mandate school policies at this level of specificity. Further,

	Dependent Care Expenses in Determining Medical Education Financial Aid	Education to require, as part of the accreditation standards for medical schools, that dependent health insurance, dependent care, and dependent living expenses be included both as part of the "cost of attendance" and as an educational expense for the purposes of student budgets and financial aid in medical schools; and (2) encourage medical schools to include spouse and dependent health insurance, dependent care, and dependent living expenses as part of the "cost of attendance" and as an educational expense for the purposes of student budgets and financial aid. (Res. 301, A-03; Modified: CME Rep. 2, A-13)	elements included in defining "cost of attendance" are relevant to and guided by lenders and financial aid rules.
D-310.953	Exploring the Feasibility of Clinic-Based Residency Programs	Our AMA: (1) advocates that key stakeholders, such as the Accreditation Council for Graduate Medical Education, explore the feasibility of extending residency programs through a pilot study placing medical graduates in integrated physician-led practices in order to expand training positions and increase the number of physicians providing healthcare access; and (2) encourages that pilot studies of clinic-based residency program expansion be funded by private sources. (Res. 906, I-13)	Sunset; this directive has been accomplished.
D-310.954	Training in Reproductive Health Topics as a Requirement for Accreditation of Family Residencies	Our AMA: (1) will work with the Accreditation Council for Graduate Medical Education to protect patient access to important reproductive health services by advocating for all family medicine residencies to provide comprehensive women's health including training in contraceptive counseling, family planning, and counseling for unintended pregnancy; and (2) encourages the ACGME to ensure greater clarity when making revisions to the educational requirements and expectations of family medicine residents in comprehensive women's health topics. (Res. 317, A-13)	Retain; still relevant, but rescind and append to H-295.890, "Medical Education and Training in Women's Health," to read as follows. Also, note editorial changes to clauses 6 and 7: "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 (ACGME), and the various ACGME ~~Residency~~ Review Committees to promote attention to women's health in accreditation standards~~.~~; (8) will work with the ACGME to protect patient access to important reproductive health services by advocating for all family medicine residencies to provide comprehensive women's health, including training in contraceptive counseling, family planning, and counseling for unintended pregnancy; and (9) encourages the ACGME to ensure clarity when making revisions to the educational requirements and expectations of family medicine residents in comprehensive women's health topics."
D-35.980	Primary Care Physician Supply	Our AMA will continue to work with interested stakeholders to gather and disseminate data regarding the primary care physician supply. (Res. 217, I-13)	Sunset; still relevant, but already reflected in H-200.949 (25), "Principles of and Actions to Address Primary Care Workforce," which reads as follows: "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."
H-200.992	Designation of Areas of Medical Need	The AMA urges the federal government to: (1) consolidate the federal designation process for identifying areas of medical need; (2) coordinate the federal	Sunset. Accomplished through the Health Resources and Services Administration's consolidation of federal shortage area designations.

		designation process with state agencies to obviate duplicative activities; and (3) ask for state and local medical society approval of said designated underserved areas. (Res. 24, A-82; CLRPD Rep. A, I-92; CME Rep. 2, A-03; CME Rep. 2, A-13)	
H-200.994	Health Workforce	The AMA endorses the following principle on health manpower: Both physicians and allied health professionals have legal and ethical responsibilities for patient care, even though ultimate responsibility for the individual patient's medical care rests with the physician. To assure quality patient care, the medical profession and allied health professionals should have continuing dialogue on patient care functions that may be delegated to allied health professionals consistent with their education, experience and competency. (BOT Rep. C, I-81; Reaffirmed: Sunset Report, I-98; Modified: CME Rep. 2, I-03; Reaffirmed: CME Rep. 2, A-13)	Sunset; still relevant, but reflected in other, more recent policies, including H-160.950, "Guidelines for Integrated Practice of Physician and Nurse Practitioner"; H-160.906, "Models / Guidelines for Medical Health Care Teams"; and "Code of Medical Ethics 10.5."
H-255.970	Employment of Non-Certified IMGs	Our AMA will: (1) oppose efforts to employ graduates of foreign medical schools who are neither certified by the Educational Commission for Foreign Medical Graduates, nor have met state criteria for full licensure; and (2) encourage states that have difficulty recruiting doctors to underserved areas to explore the expanded use of incentive programs such as the National Health Service Corps or J1 or other visa waiver programs. (Res. 309, A-03; Reaffirmed: CME Rep. 2, A-13)	Retain; still relevant, with editorial changes as shown below. All physicians practicing medicine should be licensed. The ECFMG (a member of Intealth) is the organization that evaluates the credentials of international physicians, so it is important that all physicians training in non-U.S.-based medical schools be vetted through the ECFMG. "Our AMA will: (1) oppose efforts to employ graduates of foreign medical schools who are neither certified by the ~~Educational Commission for Foreign Medical Graduates,~~ ECFMG (a member of Intealth) nor have met state criteria for full licensure; and "(2) encourage states that have difficulty recruiting doctors to underserved areas to explore the expanded use of incentive programs such as the National Health Service Corps or J-1 or other visa waiver programs."
H-255.976	Speech Tests for International Medical Graduates	The AMA encourages state licensing boards to accept ECFMG certification in satisfaction of requirements for demonstrating English language competence. (CME Rep. B, A-93; Reaffirmed: CME Rep. 2, A-03; Reaffirmed: CME Rep. 2, A-13)	Retain, as state medical boards have differing policies. Note editorial change below, to ensure congruence in terminology with the policy above: "The AMA encourages state licensing boards to accept ~~ECFMG~~ certification by the ECFMG (a member of Intealth) as satisfying the ~~in~~

			~~satisfaction of~~ requirements for demonstrating English language competence.”
H-255.985	Graduates of Foreign Health Professional Schools	(1) Any United States or alien graduate of a foreign health professional education program must, as a requirement for entry into graduate education and/or practice in the United States, demonstrate entry-level competence equivalent to that required of graduates of United States' programs. Agencies recognized to license or certify health professionals in the United States should have mechanisms to evaluate the entry-level competence of graduates of foreign health professional programs. The level of competence and the means used to assess it should be the same or equivalent to those required of graduates of U.S. accredited programs. (2) All health care facilities, including governmental facilities, should adhere to the same or equivalent licensing and credentialing requirements in their employment practices. (BOT Rep. NN, A-87; Reaffirmed: Sunset Report, I-97; Reaffirmed: Res. 320 and Res. 305, A-03; Reaffirmed: CME Rep. 1, I-03; Reaffirmed: CME Rep. 2, A-13)	Sunset. Still relevant, but already reflected in other policy, such as H-255.988, “AMA Principles on International Medical Graduates,” which reads in part: “6. Working with the Accreditation Council for Graduate Medical Education (ACGME) and the Federation of State Medical Boards (FSMB) to assure that institutions offering accredited residencies, residency program directors, and U.S. licensing authorities do not deviate from established standards when evaluating graduates of foreign medical schools.” “8. The AMA continues to support the activities of the ECFMG related to verification of education credentials and testing of IMGs.” Also superseded by H-255.966, “Abolish Discrimination in Licensure of IMGs,” which reads in part as shown (also note editorial change to clause 3, below): “A. State medical boards should ensure uniformity of licensure requirements for IMGs and graduates of U.S. and Canadian medical schools, including eliminating any disparity in the years of graduate medical education (GME) required for licensure and a uniform standard for the allowed number of administrations of licensure examinations. . . .” “2. Our AMA will continue to work with the FSMB to encourage parity in licensure requirements for all physicians, whether U.S. medical school graduates or international medical graduates. “3. Our AMA will continue to work with the Educational Commission for Foreign Medical Graduates (a member of Intealth) and other appropriate organizations in developing effective methods to evaluate the clinical skills of IMGs. “4. Our AMA will work with state medical societies in states with discriminatory licensure requirements between IMGs and graduates of U.S. and Canadian medical schools to advocate for parity in licensure requirements, using the AMA International Medical Graduate Section licensure parity model resolution as a resource.”

H-275.959	Cognitive Exams	It is the policy of the AMA to oppose the use of cognitive exams as the major means of evaluating a physician's clinical competence. (Sub. Res. 205, A-90; Modified: Sunset Report, I-00; Reaffirmed: CME Rep. 2, A-10; Reaffirmed: CME Rep. 2, A-13)	Sunset; still relevant, but superseded by H-275.916, "Guiding Principles and Appropriate Criteria for Assessing the Competency of Physicians Across the Professional Continuum."
H-275.998	Physician Competence	Our AMA urges: (1) The members of the profession of medicine to discover and rehabilitate if possible, or to exclude if necessary, the physicians whose practices are incompetent. (2) All physicians to fulfill their responsibility to the public and to their profession by reporting to the appropriate authority those physicians who, by being impaired, need help, or whose practices are incompetent. (3) The appropriate committees or boards of the medical staffs of hospitals which have the responsibility to do so, to restrict or remove the privileges of physicians whose practices are known to be incompetent, or whose capabilities are impaired, and to restore such physicians to limited or full privileges as appropriate when corrective or rehabilitative measures have been successful. (4) State governments to provide to their state medical licensing boards resources adequate to the proper discharge of their responsibilities and duties in the recognition and maintenance of competent practitioners of medicine. (5) State medical licensing boards to discipline physicians whose practices have been found to be incompetent. (6) State medical licensing boards to report all disciplinary actions promptly to the Federation of State Medical Boards and to the AMA Physician Masterfile. (Failure to do so simply allows the incompetent or impaired physician to migrate to another state, even after disciplinary action has been taken against him, and to continue to practice in a	Retain; still relevant.

		different jurisdiction but with the same hazards to the public.) (CME Rep. G, A-79; Reaffirmed: CLRPD Rep. B, I-89; Reaffirmed: Sunset Report, A-00; Reaffirmation I-03; Reaffirmed: CME Rep. 2, A-13)	
H-295.900	Creating an Effective Environment for Medical Student Education	1. The AMA encourages the development of a model student orientation program that includes workshops that address health awareness for students and standards of behavior for teachers and learners. 2 .Our AMA will: (A) ask the Liaison Committee on Medical Education to ensure that medical schools have policies to protect medical students from retaliation based on reporting incidents of mistreatment; and (B) through the Learning Environment Study, conduct research and disseminate findings on the medical education learning environment including the positive and negative elements of that environment that impact the teacher-learner relationship; and (C) encourage the Association of American Medical Colleges and the American Association of Colleges of Osteopathic Medicine to identify best practices and strategies to assure an appropriate learning environment for medical students. (CME Rep. 9, A-98; Reaffirmed: CME Rep. 2, A-08; Appended: CME Rep. 9, A-13)	Sunset. This has already been accomplished, and clause 2 is an LCME requirement, as stipulated in LCME standard 3.6, Student Mistreatment: "A medical school develops effective written policies that define mistreatment, has effective mechanisms in place for a prompt response to any complaints, and supports educational activities aimed at preventing mistreatment. Mechanisms for reporting mistreatment are understood by medical students, including visiting medical students, and ensure that any violations can be registered and investigated without fear of retaliation."
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)	Sunset. LCME Element 12.8, "Student Exposure Policies/Procedures," (see below) addresses this policy, except for "feasibility of financial assistance" (in this regard, LCME requires disability insurance for medical students). "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."
H-295.933	Medical School Affiliations With VA Medical Centers	The AMA will work to ensure that the successful relationships between VA academic medical centers and the nation's medical schools are maintained. (Sub. Res. 313, A-93; Modified: CME Rep. 2, A-03; Reaffirmed: CME Rep. 2, A-13)	Retain, still relevant, with editorial change to title and policy to specify the acronym "VA," as shown below: Medical School Affiliations With Veterans Affairs (VA) Medical Centers "The AMA will work to ensure that the successful relationships between Veterans Affairs (VA) academic medical centers and the nation's medical schools are maintained."
H-295.940	Recruiting Students of Medicine at the Elementary and High School Levels	The AMA will work with state and local medical societies to encourage teachers at primary and secondary schools to alert their students to the potential for professional and personal satisfaction from service to others through a career in medicine. (Res. 319, A-92; Reaffirmed: CME Rep. 2, A-03; Reaffirmed: CME Rep. 2, A-13)	Retain; still relevant, as reflected in the AMA's Doctors Back to School program.
H-295.984	Family Medicine as a Fundamental Subject in Medical Schools	The AMA recommends that U.S. medical schools include family medicine as a clinical subject. (Res. 14, I-84; Reaffirmed: CMS Rep. L, A-93; Reaffirmed: CME Rep. 2, A-03; Reaffirmed: CME Rep. 2, A-13)	Retain; still relevant. As of the 2021-22 academic year, 23 (15 percent) of the 155 LCME-accredited schools did not report that they offered family medicine as a separate required clerkship or as part of a longitudinal integrated clerkship. Family medicine is a required element of all COCA-accredited medical schools.
H-300.964	Medical Ethics and Continuing Medical Education	The AMA encourages accredited continuing medical education sponsors to plan and conduct programs and conferences emphasizing ethical principles in medical decision making. (Res. 323, I-92; Reaffirmed: CME Rep. 2, A-03; Reaffirmed: CME Rep. 2, A-13)	Retain. Still relevant.
H-300.966	Continuing Medical Education for Physicians in the Hospital Setting	It is the policy of the AMA that the continuing medical educational programs offered physicians in the hospital setting be the responsibility of the hospital medical staff and directed by the medical staff as defined in the hospital bylaws. (Res. 318, A-92; Reaffirmed: CME Rep. 2, A-03; Reaffirmed: CME Rep. 2, A-13)	Retain. Still relevant.

H-300.983	Community Hospital Continuing Medical Education	1. The AMA believes that quality, patient-centered, cost-effective continuing medical education is important for hospital medical staffs, and that the cooperative efforts of hospitals, state and county medical societies, and academic medical centers contribute to achieving this goal. 2. Our AMA will advocate for the availability of accessible, affordable, high-quality continuing medical education for small rural and community hospitals. (CME Rep. D, A-85; Reaffirmed by CLRPD Rep. 2, I-95; Reaffirmed: CME Rep. 2, A-05; Appended: Res. 316, A-13)	Retain; still relevant.
H-310.908	Support for Residents and Fellows During Family and Medical Leave Time	Our AMA encourages specialty boards, the Accreditation Council for Graduate Medical Education and residency review committees to study alternative mechanisms and pathways based on competency evaluation to ensure that individuals who have taken family and medical leave graduate as close to their original completion date as possible. (Res. 307, A-13)	Sunset; still relevant, but superseded by and reflected in H-405.960, "Policies for Parental, Family and Medical Necessity Leave."
H-310.913	Physician Extenders	1. In academic environments, our AMA will only support payment models for non-physician practitioners that do not interfere with graduate medical training. 2. Our AMA supports the concept that procedural training is a critical portion of resident education and the augmentation of patient care by non-physician practitioners should not interfere with a resident's ability to achieve competence in the performance of required procedures. (Res. 208, I-10; Appended: CME Rep. 8, A-13)	Retain; still relevant.
H-310.946	Training Physicians in Non-Traditional Sites	It is the policy of the AMA to promote and support the training of physicians in non-traditional sites, including nursing homes. (Res. 301, I-93; Reaffirmed: CME Rep. 2, A-03; Reaffirmed: CME Rep. 2, A-13)	Retain, still relevant, but incorporate into the more expansive Policy H-200.949 (13), "Principles of and Actions to Address Primary Care Workforce," which reads: "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 those in non-traditional sites,

			including nursing homes, 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)."
H-310.952	Housestaff Input During the ACGME Review Process	The AMA asks its representatives to the Accreditation Council for Graduate Medical Education to support a requirement that site visitors to both residency training programs and institutions conduct interviews with residents, including peer-selected residents, as well as with administrators and faculty. (Res. 314, I-92; Reaffirmed: CME Rep. 2, A-03; Reaffirmed: CME Rep. 2, A-13)	Sunset; this has been accomplished and is in place at the ACGME, through resident surveys during program site visits.
H-310.976	Gender-Based Questioning in Residency Interviews	The AMA (1) opposes gender-based questioning during residency interviews in both public and private institutions for the purpose of sexual discrimination; (2) supports inclusion in the AMA Fellowship and Residency Interactive Database Access (FREIDA) system information on residency Family and Medical Leave policies; and (3) supports monitoring the Accreditation Council for Graduate Medical Education as it proposes changes to the "Common Requirements" and the "Institutional Requirements" of the "Essentials of Accredited Residencies," to ensure that there is no gender-based bias. (Res. 125, I-88; Reaffirmed: Sunset Report, I-98; Modified and Reaffirmed: CME Rep. 2, A-08; Reaffirmed: CCB/CLRPD Rep. 4, A-13)	Retain clause 1; still relevant, and sunset clauses 2 and 3 for the reasons noted below. Updated version to read: "The AMA opposes gender-based questioning during residency interviews in both public and private institutions for the purpose of sexual discrimination." Sunset clause 2, as this has been accomplished, with FREIDA including program data on the maximum number of paid and unpaid days for family/medical leave as well as a hyperlink to programs' leave policies. Sunset clause 3, as the Council on Medical Education reviews all proposed changes to program and institutional requirements and provides feedback as needed. The ACGME has also placed significant emphasis on equity, including the elimination of bias across the board.
H-310.997	Accreditation of Graduate Medical Education Programs	(1) The AMA believes that (a) accreditation and certification programs in graduate medical education should be designed and operated to objectively evaluate the educational quality and content of such programs and to assure a high level of professional training, achievement, and competence; (b) accreditation and certification programs in graduate medical education should not be administered as a means of regulating or restricting the number	Retain, still relevant, with editorial changes as shown below, in that (1)(b) and (2) are essentially the same. "~~(1)~~ The AMA believes that (a) accreditation and certification programs in graduate medical education should be designed and operated to objectively evaluate the educational quality and content of such programs and to assure a high level of professional training, achievement, and competence; (b) accreditation and certification programs in graduate medical education should not be administered as a means of regulating or restricting the number of physicians entering any

		of physicians entering any specialty or field of medical practice; and (c) qualified physicians who possess the essential prerequisites are entitled to compete for training and subsequently to practice in the specialty or type of practice of their choice upon successful completion of their training. (2) The AMA opposes use of the accreditation and certification process as a means of controlling the number of physicians in any specialty or field of medical practice. (Res. 14, A-82; Reaffirmed: CLRPD Rep. A, I-92; Reaffirmed: CME Rep. 2, A-03; Reaffirmed: CME Rep. 2, A-13)	specialty or field of medical practice; and (c) qualified physicians who possess the essential prerequisites are entitled to compete for training and subsequently to practice in the specialty or type of practice of their choice upon successful completion of their training. ~~(2) The AMA opposes use of the accreditation and certification process as a means of controlling the number of physicians in any specialty or field of medical practice.~~"
H-330.950	Post-Licensure Assessment as a Condition for Physician Participation in Medicare	The AMA opposes proposals for periodic post-licensure assessment as a condition for physician participation in the Medicare program or other health-related entitlement program. (Res. 231, I-93; Reaffirmed: BOT Rep. 28, A-03; Reaffirmed: CME Rep. 2, A-13)	Retain; still relevant. The AMA continues to oppose extraneous evaluations of physicians that create burdens and are not based on evidence that they will improve care quality or patient safety. In addition, physicians are already subject to multiple assessments of their competence and ability to practice medicine, through maintaining licensure, certification, and credentials/privileges, such that any additional assessment would be duplicative. Finally, imposing an assessment as a requirement for Medicare participation may create additional burden that would drive some physicians to end their Medicare participation, threatening access to care for some of the nation's most vulnerable populations.
H-35.978	Education Programs Offered to, for or by Allied Health Professionals Associated with a Hospital	The AMA encourages hospital medical staffs to have a process whereby physicians will have input to and provide review of education programs provided by their hospital for the benefit of allied health professionals working in that hospital, for the education of patients served by that hospital, and for outpatient educational programs provided by that hospital. (BOT Rep. B, A-93; Adopts Res. 317, A-92; Reaffirmed: CME Rep. 2, A-03; Reaffirmed: CME Rep. 2, A-13)	Retain; still relevant.
H-360.997	Nursing Education	The AMA (1) supports all levels of nursing education, including baccalaureate, diploma, associate degree and practical nursing in order that individuals may be able to choose from a number of alternatives, each of which legitimately fulfills the purpose of meeting the health care needs of the	Retain; still relevant.

		nation; (2) affirms that there is no substitute for bedside teaching and practical learning in any education program for nurses; and (3) recommends strong support of multiple levels of nursing education in order to make available career ladders in the various levels of nursing education without dead-ends or repetitions of education. (Res. 4, A-82; Reaffirmed: CLRPD Rep. A, I-92; Reaffirmed: CME Rep. 2, A-03; Reaffirmed: CME Rep. 2, A-13)	

2. FINANCING MEDICAL EDUCATION (RESOLUTION 306-A-22)

Reference committee hearing: see report of Reference Committee C.

HOUSE ACTION: RECOMMENDATIONS ADOPTED AS FOLLOWS IN LIEU OF RESOLUTION 306-A-22 REMAINDER OF REPORT FILED
See Policies D-305.952, D-305.984 and H-305.925

American Medical Association (AMA) Policy D-305.951, "Medical Education Debt Cancellation in the Face of a Physician Shortage During the COVID-19 Pandemic," directs our AMA to:

> Study the issue of medical education debt cancellation and consider the opportunities for integration of this into a broader solution addressing debt for all medical students and physicians.

In addition, Resolution 306-A-22, "Creating a More Accurate Accounting of Medical Education Financial Costs," introduced by the Illinois Delegation and the American Society of Anesthesiologists, asked that the AMA "study the costs of medical education, taking into account medical student tuition and accrued loan interest, to come up with a more accurate description of medical education financial costs." This item was referred by the House of Delegates (HOD) to explore the issue of debt cancellation further and develop recommendations for broader solutions to medical student and physician indebtedness. This integrated report is in response to both the policy directive and the referral.

BACKGROUND

The price of medical education

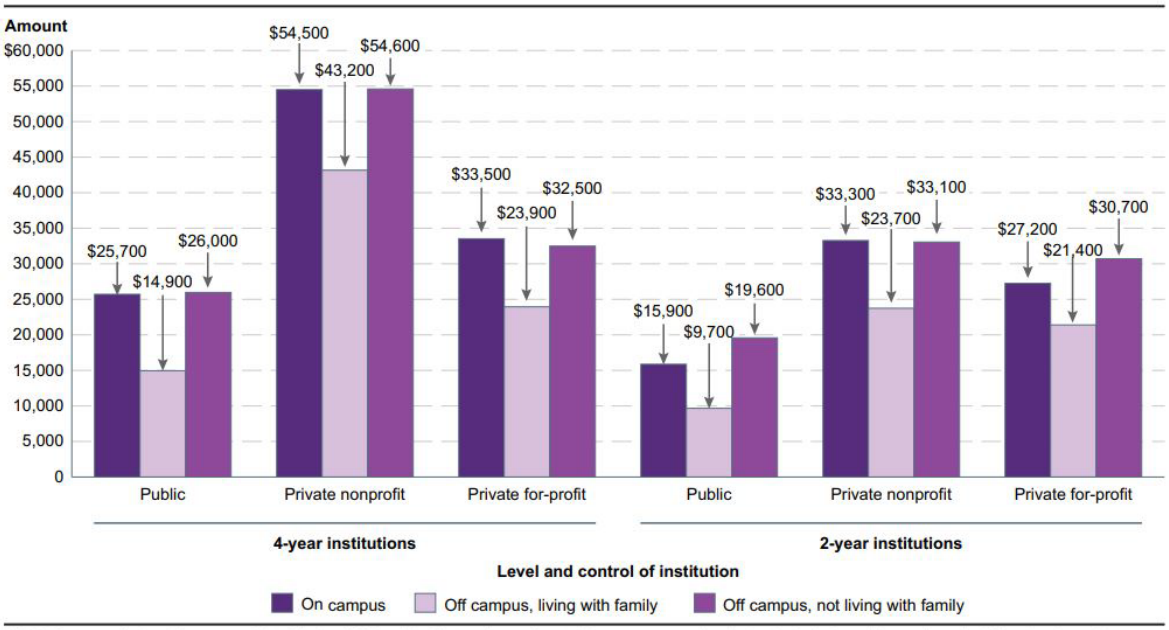
The road to becoming a physician has increasingly become an expensive one, with each step having associated costs. For some, the road includes private tutoring, test preparation courses, and/or postbaccalaureate premedical programs. Beyond tuition and student fees, costs toward becoming a physician also include the Medical College Admission Test® (MCAT®); applications to medical school; the United States Medical Licensing Examination® (USMLE®) and/or the Comprehensive Osteopathic Medical Licensing Examination of the United States (COMLEX-USA); and applications for residency, board certification, and state licensure. Some physicians also assume responsibility for the cost of their education beginning with their undergraduate education; this has been factored into the discussion of premedical education debt to create a more comprehensive description of medical education financial costs. It is also important to emphasize that cost and debt are not necessarily a 1:1 relationship, and the Council believes these factors should not be conflated.

Several studies have attempted to determine the cost of education for medical students. A study conducted in 1997 at the University of Texas-Houston Medical School found that the annual total cost (instructional, educational, and research) of the educational program was $90,660 per student in the 1994-95 academic year.[1] This same study

developed a cost-construction model to assess the cost for educating undergraduate medical education (UME) students at the institution. The study identified the cost of the entire program as well as instructional costs (direct-contact teaching), educational costs (instructional costs plus supervision), and milieu costs (educational costs plus research costs) and provides a glimpse into some of the costs tuition covers. Another study that same year reviewed 20 years of published data and determined that total educational resource costs fell into a range of $72,000 to $93,000 per student per year in 1996 dollars, or approximately $136,800 - $176,700 in 2023.[2]

The National Center for Education Statistics monitors cost trends for undergraduate institutions. Total cost of attendance (COA) is determined by the published tuition and required fees; books and supplies; and the weighted average cost for room, board, and other expenses for four years at each institution. The average COA can be varied when considering a student's living arrangement (e.g., a student may live on campus; off campus with family; or off campus but not with family). To demonstrate the range in COA for students, the average COA for a full-time student enrolled in a baccalaureate program at a four-year public institution living off campus with family was $14,900 in academic year (AY) 2020-2021. In that same year, the average COA for a full-time student enrolled in a baccalaureate program at a four-year private nonprofit living off campus, not with family, was $54,600.[3] Figure 1 further illustrates the range of total costs for baccalaureate programs by type of institution and student living situation.

Figure 1. Average total cost of attending degree-granting institutions for first-time, full-time undergraduate students, by level and control of institution and student living arrangement: Academic year 2020–21. Reprinted from the National Center for Education Statistics. (2020). Price of attending an undergraduate institution. The Condition of Education. Accessed January 2023. https://nces.ed.gov/programs/coe/pdf/2022/cua_508.pdf.



NOTE: Data are for the 50 states and the District of Columbia. The total cost of attending a postsecondary institution includes tuition and required fees; books and supplies; and the average cost for room, board, and other expenses. Student charges data for 2019–20 were collected prior to the outbreak of the coronavirus pandemic and therefore do not reflect any adjustments institutions might have made later in the academic year due to the pandemic. Tuition and fees at public institutions are the lower of either in-district or in-state tuition and fees. Excludes students who previously attended another postsecondary institution or who began their studies on a part-time basis. Data are weighted by the number of students at the institution who were awarded Title IV aid. Title IV aid includes grant aid, work-study aid, and loan aid. Although rounded numbers are displayed, the figures are based on unrounded data.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Winter 2020–21, Student Financial Aid component; and Fall 2020, Institutional Characteristics component. See *Digest of Education Statistics 2021*, table 330.40.

The variation in COA continues through medical school. According to the Association of American Medical Colleges (AAMC), the median four-year COA in 2019 at a public allopathic medical school was $250,222 and $330,180 at a private allopathic medical school.[4] For osteopathic medical colleges, in AY 2021-2022, the average four-year COA at a public osteopathic medical college was $281,946 and $337,144 at a private osteopathic medical college.[5] As of 2022, of the total 155 allopathic medical schools, 93 are public and 62 are private.[6] Of the 38 accredited colleges of osteopathic medicine, 31 of the schools are private and seven of the schools are public.[7]

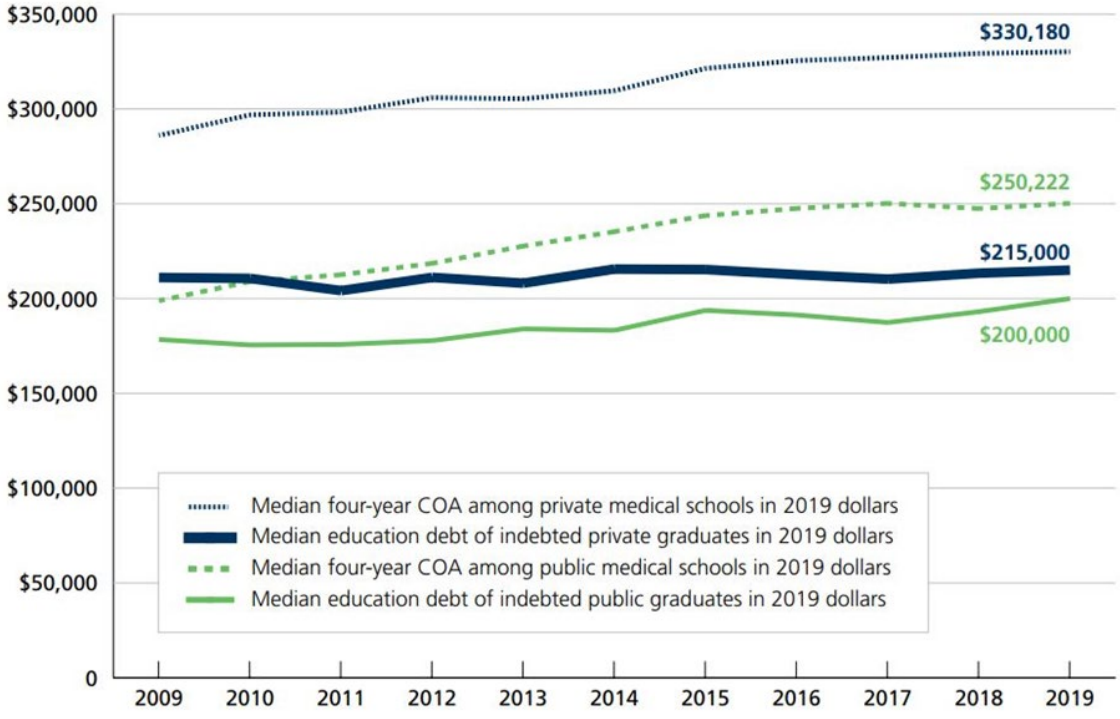
Data on cost of attendance and education debt

The AAMC utilizes several tools to assess trends related to COA and education debt, including the Tuition and Student Fees Questionnaire (TSF), the AAMC Medical School Graduation Questionnaire (GQ) and the Liaison Committee on Medical Education (LCME) Part 1B Student Financial Aid Questionnaire. The TSF is administered to all allopathic medical schools to assess tuition, fees, and health insurance costs for both resident and nonresident students reported by accredited medical education programs. The GQ is administered annually to all graduating medical students to evaluate the medical school programs and medical student experiences, including financial aid and indebtedness. The LCME Part 1B Student Financial Aid Questionnaire is administered annually to allopathic medical schools and incorporated into the AAMC's Medical School Profile System to provide schools with benchmarking reports. The American Association of Colleges of Osteopathic Medicine (AACOM) also assesses trends related to COA and education debt through its Annual Osteopathic Medical School Questionnaire and Graduating Seniors Survey. The Osteopathic Medical School Questionnaire is administered to osteopathic medical colleges.

When discussing medical student debt and the resolution of that debt, the terms loan forgiveness and debt cancelation are often used interchangeably. According to the U.S. Federal Student Aid website, the terms "mean nearly the same thing," with the difference being mainly in the circumstances surrounding the termination of requirements to repay the loan.

The type of school a student attends is a factor in determining their potential debt level. Further, costs of attending medical school may vary by year at the same school due to fluctuation in tuition and fees and tends to be more expensive in the third and fourth year.[8] While private medical school graduates are slightly less likely to have debt, their individual debt levels are typically higher than those of public school graduates as private schools tend to cost more to attend than public schools. Additionally, public schools generally enroll more students. Figure 2 highlights the median COA among private and public schools compared to the education debt of allopathic medical school graduates who attended private and public schools.

Figure 2. Inflation-adjusted median education debt levels and four-year cost of attendance (COA), 2009-2019 (in constant 2019 dollars). Reprinted from Youngclaus J, Fresne JA. Physician Education Debt and the Cost to Attend Medical School: 2020 Update. Washington, DC: AAMC; 2020. Accessed January 2023.



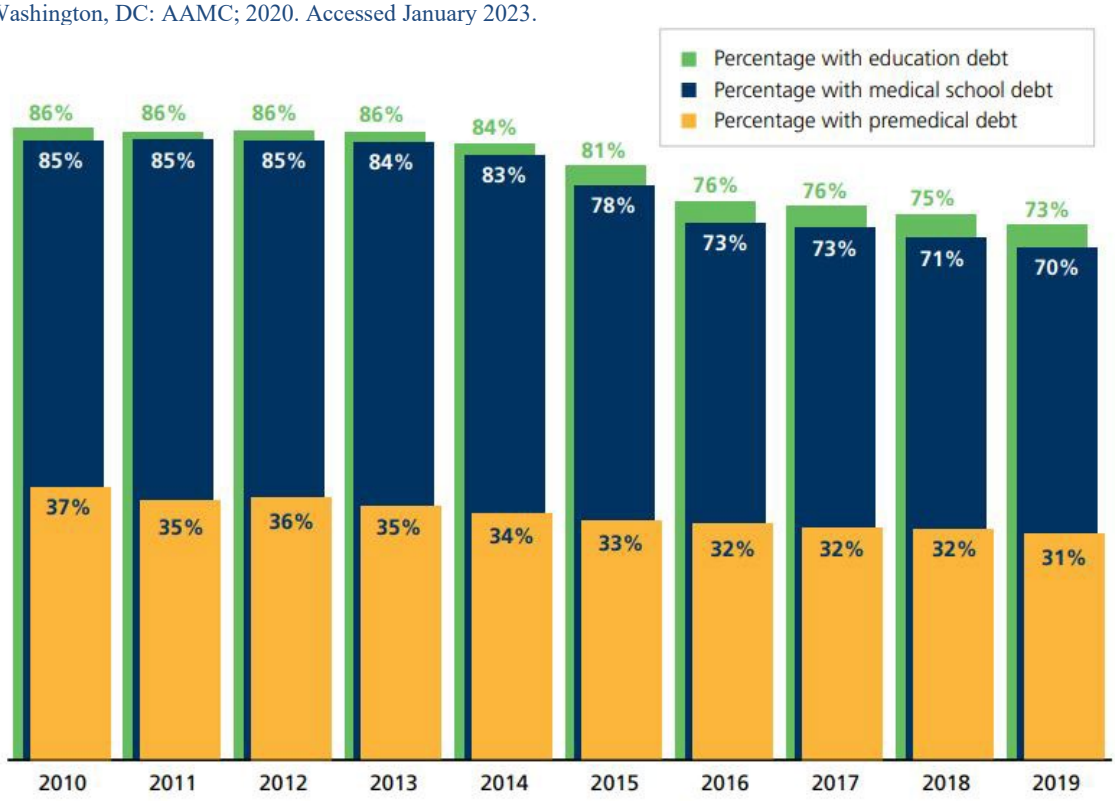
Source: AAMC Medical School Graduation Questionnaire (GQ) and Tuition and Student Fees Questionnaire (TSF).

While costs to attend medical school are rising, another emerging trend indicates a decline in the percentage of graduates who have debt. In 2013, the AAMC found that 14 percent of graduates had no debt. This percentage

nearly doubled to 27 percent in 2019.[9] While the proportion of those reporting no debt seems to be clustered among students from wealthy backgrounds, several other variables have been identified to explain this decline, including the impact of new allopathic medical schools, changes to federal loan programs, increased use of scholarships, and changes in self-reported parental income. Additionally, a 2021 report by the Council on Medical Education, "Medical Student Debt and Career Choice," revealed that the data in aggregate may conceal the actual debt load faced by individual students and that a significant subset of students have outside funding sources to offset debt.

Annual levels of premedical school debt, which is education debt incurred before starting medical school, are remarkably stable, as is the percentage of graduates reporting such debt. According to the AAMC GQ, roughly one-third of allopathic medical graduates reported having premedical school debt, and the median premedical school debt amount was exactly $25,000 in each of the past four years. Osteopathic medical graduates reported higher levels of pre-medical education debt: $51,116 in 2021, $51,230 in 2020, and $52,348 in 2019.[10] Figure 3 illustrates the percentage of U.S. allopathic medical school graduates with education, medical school, and premedical school debt from 2010 to 2019.

Figure 3. Percentage of U.S. medical school graduates with education, medical school, and premedical debt, 2010-2019. Reprinted from Youngclaus J, Fresne JA. Physician Education Debt and the Cost to Attend Medical School: 2020 Update. Washington, DC: AAMC; 2020. Accessed January 2023.



Source: AAMC Medical School Graduation Questionnaire (GQ).

The education debt of graduates varies by family income level. In 2019, the AAMC Matriculating Student Questionnaire (MSQ) found that as the level of family income increases, the percentage of funds projected to come from personal/family sources rises and the percentage from loans and scholarships declines. This finding is consistent with data from the AACOM Graduating Seniors Survey. For the past 30 years, data regarding debt and family income have been consistent, with more than half of medical school graduates belonging to families in the top quintile of U.S. family income. Earlier research supports that household income and education levels are tightly linked in the United States. Specifically, higher levels of education are correlated with higher household income and vice versa.[11,12] This is consistent with the 2019 AAMC GQ data, which found that the higher the family income level, the less likely graduates are to have premedical debt. Figure 4 illustrates the relationship between family income and premedical debt.

Figure 4 . Percentage of 2019 medical school graduates with premedical debt and median premedical debt amount by quintile of family income. Reprinted from Youngclaus J, Fresne JA. Physician Education Debt and the Cost to Attend Medical School: 2020 Update. Washington, DC: AAMC; 2020. Accessed January 2023.

Quintile of U.S. Income	Sample in this family income quintile	With premedical debt	Median premedical debt for those with such debt
1st (Lowest)	4%	51%	$30,000
2nd	7%	49%	$27,000
3rd	10%	51%	$25,000
4th	23%	45%	$25,000
5th, top 81%-95%	30%	30%	$25,000
5th (Highest), top 5%	26%	12%	$27,750
Family income not provided	N/A	28%	$27,000

Source: AAMC Medical School Graduation Questionnaire (GQ), 2019, and corresponding Matriculating Student Questionnaire (MSQ). Family income quintiles are based on U.S. Census data.

There are also variations in student indebtedness by race and ethnicity. In 2019, 91 percent of Black allopathic medical graduates, 84 percent of Hispanic allopathic medical graduates, and 80 percent of American Indian allopathic medical graduates reported having medical education debt compared to 75 percent of white allopathic medical graduates and 61 percent of Asian allopathic medical graduates. Among allopathic medical school graduates who reported multiple combinations of race and ethnicity or "other," 71 percent reported having educational debt.[1] In that same year and among all osteopathic graduates who reported debt, 92 percent were Black, 84 percent were Hispanic, 85 percent were white, and 74 percent were Asian. Those who indicated they were American Indian and Alaska Native, Native Hawaiian and Pacific Islander or multiple races were categorized as "all others" and in this group 74 percent reported debt.[5] Due to the limited number of AI/NA osteopathic medical graduates, their median education debt is unknown.

In 2019, Black allopathic and osteopathic medical graduates had the highest median education debt, of $230,000 and $304,908, respectively. Asian allopathic and osteopathic medical graduates had the lowest median education debt, at $180,000 and $229,921, respectively. Hispanic allopathic and osteopathic medical graduates had median education debt of $190,000 and $299,946, respectively. White allopathic and osteopathic medical graduates had a median education debt of $200,000 and $270,000, respectively. AI/AN allopathic medical graduates had the second highest median education debt, at $212,375.[1,5]

The Council on Medical Education recently reported that claims that education debt influences specialty choice are unfounded and "a comprehensive review of the academic literature yielded numerous research reports indicating little to no connection between specialty choice and economic factors such as debt and income potential.[13] Phillips et al. found that "students from lower-income families are more likely to eventually practice primary care. Additionally, public school graduates were 30 percent more likely to choose primary care and twice as likely to select family medicine" as a subspecialty.[14] Additionally, Kahn and Nelling found that "pursuing a medical degree is financially beneficial" and "the numbers of physicians graduating each year has begun to increase due to gradual expansion of class sizes and the establishment of new medical schools."[15] For instance, 16 allopathic medical schools, and 12 osteopathic medical schools have opened in the past 10 years. This finding is further supported by the AAMC and AACOM, as both have witnessed an increase in the number of applicants and overall enrollments over the last decade for allopathic and osteopathic medical school programs.[16,17]

Data from the AAMC demonstrate that the number of applicants to allopathic medical schools has increased from 48,014 in AY 2013-14 to 62,443 in AY2021-22 for an increase of 30 percent. For the same period, matriculants increased from 20,055 to 22,666 for an increase of 13 percent. The same data demonstrate a matriculant to applicant ratio of 0.41 in 2013-14 decreasing to 0.36 in 2021-22 despite an increase in the number of schools and total number of admissions. Collectively, these data suggest that increasing cost of medical education and rising student debt are not limiting interest or enrollment in medical education.

Data on Noneducation Debt

The AAMC GQ also analyzes noneducation debt in five categories: credit card, car, residency relocation loan, mortgage, and other. The AAMC GQ data from 2019 highlight that noneducation debt is not common and the median amounts (excluding mortgages) are significantly lower than the median education debt amounts. Figure 5 provides an overview of the noneducation debt data for allopathic medical school graduates in 2019.

Figure 5. Noneducation debt data for medical school graduates, 2019. Reprinted from Youngclaus J, Fresne JA. Physician Education Debt and the Cost to Attend Medical School: 2020 Update. Washington, DC: AAMC; 2020. Accessed January 2023.

Type of noneducation debt	Percentage with this debt	Median amount for graduates with this debt
Credit card	13%	$5,000
Car loan	7%	$10,000
Residency relocation loan	3%	$10,000
Other debt	1%	$9,000
Sum of all four nonmortgage debt categories	18%	$10,000
Mortgage	4%	$150,000

Source: AAMC Medical School Graduation Questionnaire (GQ), 2019.

Note: The percentage values were rounded off.

The following combinations were the most reported in the subset of graduates with noneducation debt: 45 percent reported having credit card debt only, 18 percent reported having car debt only, 17 percent reported having both credit card and car debt, and 7 percent reported having both credit card and residency relocation debt. All other possible combinations occurred less than 3 percent of the time. These findings were consistent with the 2018 data. Additionally, nonmortgage, noneducation debt was more common among graduates who identified as married or having dependents. Figure 6 divides allopathic medical graduates into four groups based on their marital status and whether they have dependents and shows their debt characteristics.

Figure 6. Percentage of selected debt characteristics of 2019 graduates by marital and dependents status. Reprinted from Youngclaus J, Fresne JA. Physician Education Debt and the Cost to Attend Medical School: 2020 Update. Washington, DC: AAMC; 2020. Accessed January 2023.

Debt Characteristic	No Dependents (93%)		With Dependents (8%)	
	Single (76%)	Married (17%)	Married (7%)	Single (1%)
Percentage of all nonmortgage, noneducation debt held	55%	21%	21%	3%
Percentage with nonmortgage, noneducation debt	15%	21%	37%	43%
Median nonmortgage, noneducation debt	$8,000	$10,000	$15,000	$15,500
Percentage of females/males	52%/48%	49%/51%	31%/69%	44%/56%
Percentage graduating from public/private medical schools	58%/42%	69%/31%	70%/30%	73%/27%
Percentage of group with education debt	72%	75%	77%	91%
Median education debt of indebted graduates	$200,000	$200,000	$210,000	$250,000

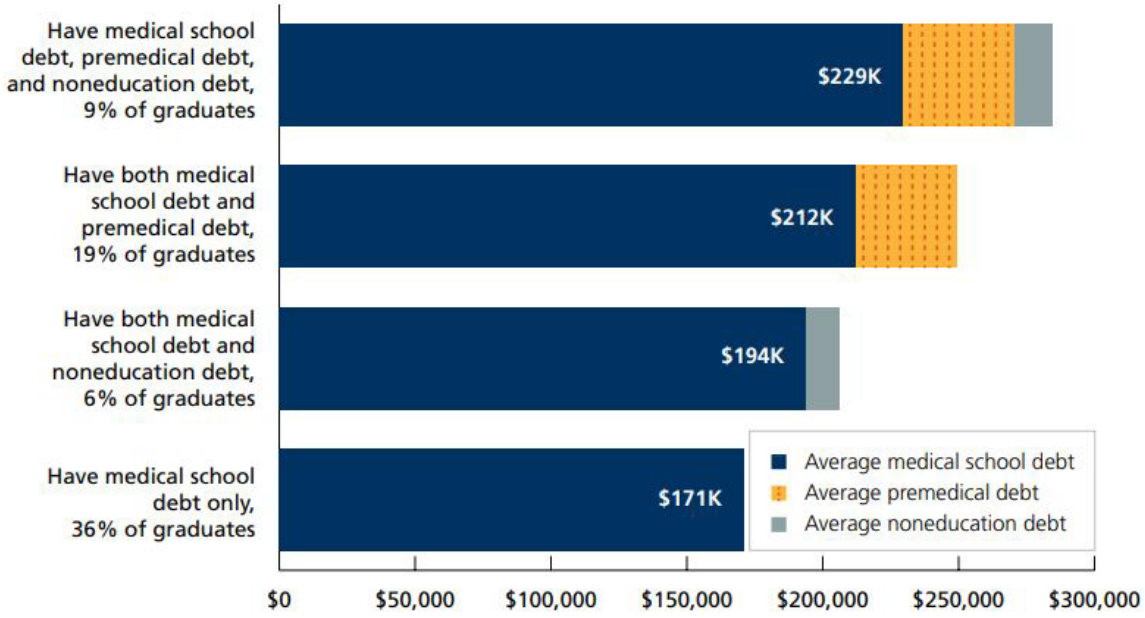
Source: AAMC Medical School Graduation Questionnaire (GQ), 2019.

Note: Nonmortgage, noneducation debt = credit card + car + residency relocation + other. Single = single (never legally married) or divorced, widowed, or separated but still legally married. Married = legally married, common law, or civil union.

Another pattern has emerged while surveying medical education debt. That is, the average level of medical school debt per graduate increases as the types of debt held increases. Only 30 percent of medical school graduates have no medical school debt at all. For those who do have debt, 36 percent have medical school debt only, 19 percent have medical school debt and premedical school debt, and 9 percent have medical school debt, premedical school debt,

and noneducation debt. Only 6 percent of graduates have both medical school debt and noneducation debt. Figure 7 shows the average amount of debt among each of these groups.

Figure 7. Average medical school debt by type of debt held by 2019 indebted graduates. Noneducation debt excludes mortgage data and includes credit card, car, residency relocation, and other debt. Not shown are the 30 percent of graduates with no medical school debt. Reprinted from Youngclaus J, Fresne JA. Physician Education Debt and the Cost to Attend Medical School: 2020 Update. Washington, DC: AAMC; 2020. Accessed January 2023.



Source: AAMC Medical School Graduation Questionnaire (GQ), 2019.

AACOM monitors non-educational debt in aggregate, categorized by graduates of public and private schools. Table 1 outlines the reported non-educational debt of graduating seniors for the most recent three years for which data are available.

Table 1: Median non-educational debt – graduating seniors

Reported non-educational debt	Debt#			% in debt		
	All schools	Public	Private	All schools	Public	Private
2020-2021	$30,486	$28,011	$30,881	33%	33%	33%
2019-2020	$25,205	$23,518	$25,537	37%	36%	37%
2018-2019	$24,731	$24,834	$24,712	38%	36%	38%

*All debt data are self-reported by respondents of the survey.
#Mean taken from responses greater than zero.
Source: American Association of Colleges of Osteopathic Medicine. 2020-2021 Academic Year, AACOM Graduating Senior Survey, Summary Report. Published October 2021. Accessed March 20, 2023.

Understanding the impact of accrued interest on debt

Paying off education debt takes a considerable amount of time. A 2019 survey of physicians who had graduated from medical school in 2015 or earlier found that 35 percent had paid off their student loans. Of the respondents that still reported debt, 80 percent had more than $100,000 in debt and 32 percent had more than $250,000.[18] Assessing the impact of accrued interest on education debt is complicated, beginning with interest rates. Congress sets the interest rates for federal student loans, while private lenders establish their own rates. Borrowers also have the option of fixed or variable rates for their loans. Fixed loan rates remain the same for the duration of the repayment term. Variable interest rates are based on debt market conditions and can fluctuate over time. Like fixed rate loans, payments on variable rate loans are initially applied to the interest and then the principle. Variable interest rates tend to initially be lower than fixed interest rates, but they can increase significantly depending on market conditions,

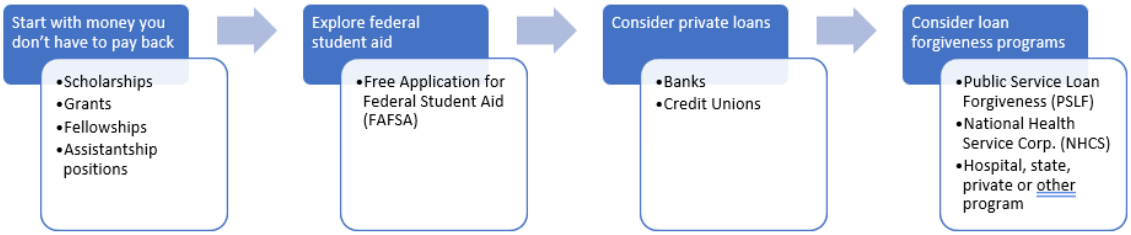
which makes them a riskier option for borrowers.[19] At the time of this report, federal student loans offer fixed interest rates of 6.54 percent or 7.54 percent, while private lenders offer fixed or variable interest rates ranging between 3.5 to 15 percent.[20] If a borrower is on an extended payment plan or has deferred their payments, the interest continues to accrue. Negative amortization occurs when the monthly interest accruing is higher than the monthly loan payment one makes. Negative amortization can occur during residency; however, with rare exceptions, compensation after residency is enough to repay all levels of educational debt.

Mechanisms to pay for medical education

As discussed in an earlier Council report on medical student debt and career choice, the relative lack of financial education among medical students is a concern. A study of first- and fourth-year medical students by Jayakumar et al. found low levels of financial literacy and lack of preparedness for managing personal finances, including strategies for effective saving and investing and practice management.[21] Equally concerning, the study's authors describe the lack of improvement in financial literacy between entering and graduating medical students, regardless of whether their medical school offered such education.

The AAMC Financial Information, Resources, Services, and Tools (FIRST) program provides free resources, including publications, videos, webinars, infographics, and charts to help students and residents make informed financial decisions related to their education. In addition, colleges and universities have offices of financial aid to support and assist students with their financial concerns. Sallie Mae provides guidance on how to create a plan to pay for aspiring physicians. They offer a three-step approach to help inform students how to control costs associated with medical school. The model below outlines these three steps and includes a fourth step to include loan forgiveness programs, which have been historically underutilized.

Figure 8. Creating a plan to pay for medical school



Source: Sallie Mae, Paying for Medical School, https://www.salliemae.com/student-loans/graduate-school-information/ways-to-pay-for-graduate-school/paying-for-medical-school/. Accessed March 20, 2023.

Loan forgiveness opportunities and limitations

There are a variety of loan forgiveness programs at the federal, state and local level. The most popular program among medical school graduates is the Public Service Loan Forgiveness (PSLF) program. A 2017 Council report, "Expansion of Public Service Loan Forgiveness," provides additional background on the PSLF program, which promises cancellation of remaining federal student loan balances after 10 years' worth of payments made while employed by an eligible nonprofit or government agency. Payment amounts during the 10-year period are income-based. Physicians can use their time in residency toward the 10-year requirement if they make regular payments during those years and their employer is a nonprofit teaching hospital. Following residency, physicians can continue in a nonprofit for the remaining payment years.

While indebtedness impacts most graduates, the majority do not enter loan forgiveness programs. Only 34 percent of indebted allopathic medical graduates report plans to pursue PSLF. Among indebted osteopathic medical graduates, this percentage is higher, with 50 percent reporting they will participate in a loan forgiveness program and, of those, 70 percent reporting they plan to pursue PSLF.[2,5] Figure 9 breaks down the various details of indebted allopathic medical graduates' plans to enter loan forgiveness programs.

Figure 9. Various Details of Indebted Graduates by Plans to Enter a Loan Forgiveness Program, 2019 Only. Reprinted from Youngclaus J, Fresne JA. Physician Education Debt and the Cost to Attend Medical School: 2020 Update. Washington, DC: AAMC; 2020. Accessed January 2023.

Plan to Enter	Percentage of sample	Median education debt	Percentage of graduates of public/ private schools	Education debt level		
				Lowest third <$160,000	Middle third $160,000-$246,000	Highest third >$246,000
Public Service Loan Forgiveness (PSLF)	34%	$240,000	57%/43%	16%	36%	48%
Other Federal, including National Health Service Corps (NHSC)	3%	$200,000	66%/34%	3%	2%	3%
Hospital, state, private, or other program	8%	$220,000	70%/30%	6%	8%	9%
No plans to enter a program	56%	$175,000	63%/37%	75%	53%	40%
Total percentage, median education debt, and overall percentage of respondents in public/private schools	100%	$200,000	61%/39%	100%	100%	100%

Source: AAMC Medical School Graduation Questionnaire (GQ), 2019.

Note: Total percentages might not equal 100 percent due to rounding. The "Other Federal" category is for the National Health Service Corps (NHSC), the Indian Health Service Corps, the armed services (Navy, Army, Air Force), and other uniformed services. Public Service Loan Forgiveness (PSLF) is a Department of Education program.

The business of medical education

The true cost of undergraduate medical education is difficult to determine for several reasons. Medical education programs are typically imbedded in increasingly complex medical schools. Medical schools often have multiple mission areas and educational programs that share common resources and infrastructure. Faculty within the schools often have roles and responsibilities beyond the educational program, with some having minimal contribution to the education of medical students. The funding models for schools and faculty vary widely, often with funds flowing in opposing directions between medical schools and clinical affiliates. Teaching students, engagement in faculty governance of the educational program, faculty development as teachers, and other roles result in decreased clinical and research productivity, which in turn results in opportunity cost for the medical school, clinical affiliates, and other providers. The models for funding these opportunity costs vary across and within institutions, rendering an accurate cost analysis difficult at best.

The effects of the increasing cost of medical education and increasing student debt on health care costs in general are even more difficult to determine but may be negligible in the totality of the nation's health care costs. As noted above, there are opportunity costs for clinical faculty who teach medical students by way of decreased productivity. Approximately 18 percent of physicians in the U.S. have faculty appointments,[22] but the number of these physicians who make a significant contribution to medical student teaching is unknown, as is the percentage of their time spent teaching medical students and the funding source for these activities. Further, physician incomes make up only 10 percent of total health care spending.[23] Taking all these factors into consideration, educating medical students probably has minimal impact on current health care costs. There are also direct costs incurred to support medical students in clinical settings, but these are also very small in the context of a health system. Downstream, medical school graduates in clinical practice have little control over clinical income by way of reimbursements, as these are largely set by third party payers. In summary, while the actual effect of the cost of medical student education on the

health care system is not known, the contribution is probably relatively small in comparison to other drivers of health care costs.

While the cost of medical education and student debt are likely to be barriers to diversity in the physician workforce and deterrents for potential applicants with fewer financial resources, the cost of medical education does not appear to be a factor in limiting the overall size of the applicant pool.

Return on educational investment for physicians

Another consideration is the reality and perception of educational debt for physicians versus physician income, compared to nonphysicians. According to the U.S. Bureau of Labor Statistics May 2021 report on Occupational Employment and Wage Statistics, the annual mean income for physicians in general was $252,480, with a range across specialties of $198,420 for pediatricians to $353,970 for cardiologists. By comparison, the average income for four-year college degree graduates was $59,600, versus $44,100 for an associate degree and $36,600 for high school graduates.[24] For physicians, using the general annual mean income and a 30-year full-time practice life, the projected lifetime income amount would be $7.574 million in 2021 dollars. By comparison, the average tuition (not COA) for an MBA degree in 2022 was $62,460, and the annual average salary for holders of MBA degrees was approximately $115,000,[25,26] for a projected 30-year lifetime income of $3.450 million in 2022 dollars. Further, debt repayment as a percentage of income is highly likely to decrease over time, as overall income increases with inflation and cost-of-living increases in income, while the amount of fixed loan repayments remains constant. Taken in the context of anticipated income and the effects of inflation on the value and payments of long-term loans, medical education costs and student loans are still a good long-term investment.

Of course, these calculations do not take into consideration the length of the training program and the positive and negative effects of medical education on lifestyle and family. Nor do they factor the disproportionate effect that the cost of medical education, and debt, may have on the development of a diverse workforce. But the data clearly show that the investment in medical education, even with educational debt, is a good one. Given the many benefits, both tangible (e.g., financial) and intangible (societal standing afforded physicians in the U.S.), the medical community and society in general must consider if the cost of medical education and educational debt of medical students is misaligned with the ability to repay the debt and with the levels of income that typically follow.

SUMMARY AND RECOMMENDATIONS

Like medical school tuition, medical education debt is rising. A closer look at the data demonstrates that rising education debt represents a greater burden for specific demographics of medical school graduates, including those whose are in the lower quintiles of U.S. family income and marginalized racial groups. Efforts to diversify the physician workforce may benefit by focusing support for these groups most negatively impacted, as their experiences may contribute to improve both quality of care and access to care. That said, there is little solid evidence for a strong link between debt and career choice. Although the average amount of education debt for medical school graduates is in the six figures, the most indebted medical school graduates do not enter loan forgiveness programs and can repay any amount borrowed regardless of specialty practice or where they live, in part due to the flexible nature of federal repayment plans that link payments to income and expectations for income after completion of training.[27]

The AMA has extensive policy in support of debt relief programs, including federal programs such as the National Health Service Corps and Indian Health Service, along with comparable programs from states and the private sector, in that "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" (H-305.925, "Principles of and Actions to Address Medical Education Costs and Student Debt"). Additionally, the AMA has numerous policies that address medical schools and the cost of medical education, including tuition and loans. Policy H-305.925(16) states that the AMA will continue to study medical education financing, so as to identify long-term strategies to mitigate the debt burden for medical students. The issue of medical education financial costs was recently studied in Council on Medical Education Report 4-N-21, "Medical Student Debt and Career Choice," which was adopted at the November 2021 Meeting. While the AMA also advocates for the "development of personal financial literacy capabilities" (D-295.316, "Management and Leadership for Physicians"), there continues to be a need to increase medical students' financial literacy as they plan for their future. In support of this need, the AMA continues to help individual medical students and physicians gain

this financial education by offering medical school debt management solutions through Laurel Road as well as other loans and financial services.

The Council on Medical Education therefore recommends that the following recommendations be adopted in lieu of Resolution 306-A-22 and the remainder of this report be filed:

1. That Policy D-305.952, "Medical Student Debt and Career Choice," be reaffirmed.

2. That Policy H-305.925, "Principles of and Actions to Address Medical Education Costs and Student Debt," be amended by addition of a new point (23), to read "(23) continue to monitor opportunities to reduce additional expense burden upon medical students including reduced-cost or free programs for residency applications, virtual or hybrid interviews, and other cost-reduction initiatives aimed at reducing non-educational debt."

3. That our AMA encourage medical students, residents, fellows and physicians in practice to take advantage of available loan forgiveness programs and grants and scholarships that have been historically underutilized, as well as financial information and resources available through the Association of American Medical Colleges and American Association of Colleges of Osteopathic Medicine, as required by the Liaison Committee on Medical Education and Commission on Osteopathic College Accreditation, and resources available at the federal, state and local levels.

4. That Policy D-305.984 (5), "Reduction in Student Loan Interest Rates," be rescinded, as having been fulfilled by this report:

   ~~"Work with appropriate organizations, such as the Accreditation Council for Graduate Medical Education and the Association of American Medical Colleges, to collect data and report on student indebtedness that includes total loan costs at completion of graduate medical education training."~~

5. That our AMA support federal efforts to forgive debt incurred during medical school and other higher education by physicians and medical students, including educational and cost of attendance debt.

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APPENDIX: RELEVANT AMA POLICIES

Principles 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 participation in 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 employer's PSLF program qualifying status; (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; (j) Monitor the denial rates for physician applicants to the PSLF; (k) Undertake expanded federal advocacy, in the event denial rates for physician applicants are unexpectedly high, to encourage release of information on the basis for the high denial rates, increased transparency and streamlining of program requirements, consistent and accurate communication between loan servicers and borrowers, and clear expectations regarding oversight and accountability of the loan servicers responsible for the program; (l) Work with the United States Department of Education to ensure that applicants to the PSLF and its supplemental extensions, such as Temporary Expanded Public Service Loan Forgiveness (TEPSLF), are provided with the necessary information to successfully complete the program(s) in a timely manner; and (m) Work with the United States Department of Education to ensure that individuals who would otherwise qualify for PSLF and its supplemental extensions, such as TEPSLF, are not disqualified from the program(s).
21. Advocate for continued funding of programs including Income-Driven Repayment plans for the benefit of reducing medical student load burden.
22. Strongly advocate for the passage of legislation to allow medical students, residents and fellows who have education loans to qualify for interest-free deferment on their student loans while serving in a medical internship, residency, or fellowship program, as well as permitting the conversion of currently unsubsidized Stafford and Graduate Plus loans to interest free status for the duration of undergraduate and graduate medical education.

Cost and Financing of Medical Education and Availability of First-Year Residency Positions H-305.988
Our AMA:
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.

Reduction in Student Loan Interest Rates D-305.984
1. Our AMA will actively lobby for legislation aimed at establishing an affordable student loan structure with a variable interest rate capped at no more than 5.0%.
2. Our AMA will work in collaboration with other health profession organizations to advocate for a reduction of the fixed interest rate of the Stafford student loan program and the Graduate PLUS loan program.
3. Our AMA will consider the total cost of loans including loan origination fees and benefits of federal loans such as tax deductibility or loan forgiveness when advocating for a reduction in student loan interest rates.
4. Our AMA will advocate for policies which lead to equal or less expensive loans (in terms of loan benefits, origination fees, and interest rates) for Grad-PLUS loans as this would change the status quo of high-borrowers paying higher interest rates and fees in addition to having a higher overall loan burden.
5. Our AMA will work with appropriate organizations, such as the Accreditation Council for Graduate Medical Education and the Association of American Medical Colleges, to collect data and report on student indebtedness that includes total loan costs at completion of graduate medical education training.

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.

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.

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 and residency/fellowship programs use holistic assessments of applicants that take into account the diversity of preparation and the variety of talents that applicants bring to their education with the goal of improving health care for all communities.
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.
13. Our AMA will work with the AAMC and other stakeholders to create a question for the AAMC electronic medical school application to identify previous pipeline program (also known as pathway program) participation and create a plan to analyze the data in order to determine the effectiveness of pipeline programs.

Management and Leadership for Physicians, D-295.316
1. Our AMA will study advantages and disadvantages of various educational options on management and leadership for physicians with a report back to the House of Delegates; and develop an online report and guide aimed at physicians interested in management and leadership that would include the advantages and disadvantages of various educational options.
2. Our AMA will work with key stakeholders to advocate for collaborative programs among medical schools, residency programs, and related schools of business and management to better prepare physicians for administrative, financial and leadership responsibilities in medical management.
3. Our AMA: (a) will advocate for and support the creation of leadership programs and curricula that emphasize experiential and active learning models to include knowledge, skills and management techniques integral to achieving personal and professional financial literacy and leading interprofessional team care, in the spirit of the AMA's Accelerating Change in Medical Education initiative; and (b) will advocate with the Liaison Committee for Medical Education, Association of American Medical Colleges and other governing bodies responsible for the education of future physicians to implement programs early in medical training to promote the development of leadership and personal and professional financial literacy capabilities.
4. Our AMA will: (a) study the extent of the impact of AMA Policy D-295.316, “Management and Leadership for Physicians,” on elective curriculum; and (b) expand efforts to promote the tenets of health systems science to prepare trainees for leadership roles and address prevalent challenges in the practice of medicine and public health.

3. FINANCIAL BURDENS AND EXAM FEES FOR INTERNATIONAL MEDICAL GRADUATES (RESOLUTION 305-A-22)

Reference committee hearing: see report of Reference Committee C.

HOUSE ACTION: RECOMMENDATIONS ADOPTED IN LIEU OF RESOLUTION 305-A-22 REMAINDER OF REPORT FILED
See policies H-255.964 and H-255.988

At the 2022 Annual Meeting of the American Medical Association (AMA) House of Delegates (HOD), Resolution 305-A-22 was introduced by the Resident and Fellow Section. It asks:

> That our American Medical Association work with all relevant stakeholders to reduce application, exam, licensing fees and related financial burdens for international medical graduates (IMGs) to ensure cost equity with U.S. MD and DO trainees (Directive to Take Action); and be it further
>
> That our AMA amend current policy H-255.966, “Abolish Discrimination in Licensure of IMGs,” by addition to read as follows:
>
> 2. Our AMA will continue to work with the FSMB to encourage parity in licensure requirements, and associated costs, for all physicians, whether U.S. medical school graduates or international medical graduates. (Modify Current HOD Policy)

Testimony on this item noted concern for an unintended consequence that could stimulate debate on the total costs of medical education, of which licensing fees constitute a small portion. The Council on Medical Education offered substitute language for the first resolve, asking the AMA to study the most equitable approach to achieving parity between U.S. MD and DO trainees and international medical graduates with regard to application, exam, and licensing fees and related financial burdens; the Council also suggested that the second resolve not be adopted. The Reference Committee supported study and encouraged the Council to consider the presence and nature of varying application and examination costs for U.S. medical graduate and IMG applicants. The HOD agreed, and this item was referred for study.

This report is a result of that referral. It aims to explain the steps an IMG must take to practice in the U.S. and related financial burdens to obtaining the ability to practice in the U.S., compare these IMG costs to that of non-IMG MD and DO trainees, and offer recommendations to address cost disparities.

BACKGROUND

An international medical graduate (IMG) is defined as a "physician who received a basic medical degree from a medical school located outside the United States and Canada that is not accredited by a U.S. accrediting body, the Liaison Committee on Medical Education, or the American Osteopathic Association."[1] It is the location/accreditation of the medical school that determines if the graduate is an IMG (as opposed to the citizenship of the physician). Thus, U.S. citizens who graduated from medical schools outside the United States and Canada are considered IMGs, while non-U.S. citizens who graduated from medical schools in the United States and Canada are not considered IMGs.

A recent report from the Council on Medical Education, "Expediting Entry of Qualified IMG Physicians to U.S. Medical Practice" (CME Report 4-J-21) states, "IMGs currently represent a quarter of the physician workforce and physicians-in-training in the United States. They have long been an integral part of the U.S. health care system, contributing substantially to primary care disciplines and providing care to underserved populations, and their foreign language proficiency can be invaluable when communicating with patients from the same country of origin. The diversity of IMGs contributes to the many ethnicities and cultures represented in the health care workforce. This diversity is likely to be a factor enhancing health outcomes, considering the equally diverse nature of the U.S. patient population."[2]

Further, this Council report indicates that compared with U.S. medical school graduates, IMGs provide care to a disproportionate number of socioeconomically disadvantaged patients, and certain states and specialties disproportionately depend on these physicians. These physicians play a critical role in providing health care in areas of the country with higher rates of poverty and chronic disease. Many IMGs have been practicing at institutions that are on the front line of the COVID-19 pandemic. The Health Resources and Services Administration (HRSA) offers a map of Medically Underserved Areas/Populations (MUA/P). The Association of American Medical Colleges (AAMC) State Physician Workforce Data Report provides related information.

While the intent of this report is to address application, exam, and licensing fees and related financial burdens for IMGs as compared to U.S. medical school trainees, it is important to note that U.S. trainees incur costs that IMGs may not. For example, the cost to maintain Liaison Committee on Medical Education (LCME) or Commission on Osteopathic College Accreditation (COCA) and Accreditation Council for Graduate Medical Education (ACGME) accreditation may be passed onto U.S. trainees in their medical school tuition. This is a cost not borne by foreign medical schools, although they may also have accreditation costs related to their own countries.

DISCUSSION

The pathway to medical licensure in the U.S. for all trainees involves many steps with specific timelines and deadlines. For IMGs, it is even more complicated. Some IMGs have attended private medical schools outside the U.S., while others have attended public medical schools, resulting in varied costs. Further, there have been problems with credentialing and primary source verification from some countries. The Council on Medical Education has authored a report for the Annual 2023 meeting addressing these challenges for IMGs resulting from international conflict that will provide more detail on these issues.

Before addressing the cost differences between IMGs vs U.S. medical school graduates, it is important to note that costs between MD and DO applicants to GME programs also vary. This problem was recently addressed in an AMA issue brief entitled "Single Pathway to Licensure." In addition, there are further cost differences for IMGs. For example, the United States Medical Licensing Examination® (USMLE®) Steps 1 and 2 cost IMGs $1,000[3] per exam, versus $660[4] for MD students and $715[5] for DO students. IMGs also pay international surcharges related to Steps 1 and 2 as well as application and certification fees from Educational Commission for Foreign Medical Graduates (ECFMG, a member of Intealth). See Appendix A for a more detailed review of this information.

The Federation of State Medical Boards (FSMB) provides a useful visual aid illuminating the pathway to licensure for U.S. MD and DO students and IMGs; it also includes definitions of the various related organizations, their acronyms, and links to their websites. In addition to these required steps outlined in the FSMB guide, there are many associated costs, including exam preparations and travel. When it comes to licensure, there is cost variance across states, independent of U.S. medical graduate or IMG status. Additionally, there may be different threshold qualifications for IMGs that could have their own costs[6] along with additional steps for IMGs. For example, Michigan requires IMGs seeking licensure by endorsement to have an existing license from another U.S. jurisdiction. North Carolina and New York require IMGs to have a profile set up with the FSMB Federation Credentials Verification Service.[7]

Appendix A has further detail as to the costs of the steps necessary to pursue medical education and training, as well as additional associated costs and how they vary among MD students, DO students, and IMGs. Besides the steps described in this Appendix, non-U.S. citizen IMGs undergo additional hurdles that U.S. citizen MD and DO students do not, such as visa applications for non-citizens and tests of English language proficiency.

Visa process and barriers

Approximately 50 percent of IMGs in GME are U.S. citizens or permanent residents.[8] The remaining IMGs need to obtain a visa to enter the U.S. to train and/or practice medicine. This is also true for the 0.6 percent of students in U.S. medical schools that are non-U.S. citizens.[9] For non-citizen medical school graduates, the following protocols must be accomplished:

- The U.S. employer must obtain foreign labor certification from the U.S. Department of Labor (DOL), prior to filing a petition with U.S. Citizenship and Immigration Services (USCIS).
- The USCIS must approve the petition or application (The required petition or application depends on the visa category applied for).
- The program approval must be entered in the Student and Exchange Visitor Information System (SEVIS) of the U.S. Immigration and Customs Enforcement (ICE).

Foreign physicians can work in the U.S. on four major types of visas: H-1B, J-1, O-1, and TN; the J-1 Exchange Visitor program and the H-1B Temporary Worker classification are the most common. The AMA's IMG toolkit provides additional information to understand the types of visas. Once obtained, all visas need to be renewed for the duration of residency and fellowship training, and each visa type has a different renewal schedule.

In addition to the challenges and costs of the visa application process, there have been recent political changes and public health emergencies that have caused further delays and compounded expenses. For example, on Jan 27, 2017, former President Donald J. Trump signed an executive order, "Protecting the Nation from Foreign Terrorist Entry into the United States," that resulted in travel bans impacting many IMGs and their ability to travel to the U.S. The AMA raised its concerns to the Department of Homeland Security and others, given the detrimental impact on the health care workforce and access to care. During his first day in office, President Biden issued a proclamation on "Ending Discriminatory Bans on Entry to The United States" to revoke his predecessor's Executive Order. Also, the COVID-19 pandemic impacted many IMGs by causing additional delays in travel and the processing of documents that affected their ability to start their residency, continue their training or practice, or transition from training to practice. On January 25, 2021, President Biden issued a proclamation on "the Suspension of Entry as Immigrants and Non-Immigrants of Certain Additional Persons Who Pose a Risk of Transmitting Coronavirus Disease." The Council on Medical Education has been attentive to such issues, with related reports released in 2010 and 2017, "Rationalize Visa and Licensure Process for IMG Residents" (CME 11-A-10) and "Impact of Immigration Barriers on the Nation's Health" (CME 3-I-17).

English language proficiency

Since the removal of the Clinical Skills exam component of the USMLE, IMGs are now required to prove their ability to communicate effectively in English by passing the Occupational English Test (OET). The OET is an English language test designed for health care professionals, owned by Cambridge Assessment English and the Box Hill Institute. OET has been developed to cover 12 different health care professions, including medicine. The test assesses language skills in listening, reading, writing, and speaking, utilizing typical communication scenarios from the health care industry. OET is recognized by health care organizations, hospitals, universities, boards, and councils across the world including the U.S. Passing the OET is a requirement for certification by ECFMG for all IMGs, regardless of country of origin and currently costs $455[10]; see Appendix A.

Key stakeholders

The ECFMG provides IMGs with the process for certification before they enter U.S. GME. This certification is a requirement for IMGs to take Step 3 of USMLE and to obtain an unrestricted license to practice medicine in the U.S. ECFMG programs and web services assist IMGs with the visa process, applying for GME, and verification services to obtain primary-source verification of credentials.
The Federation of State Medical Boards (FSMB) supports the state and territorial medical boards in the U.S. that license, discipline, and regulate physicians and other health care professionals. This includes exam services related to USMLE Step 3 and the Special Purpose Examination (SPEX®), as well as credentialing and licensure services. According to the FSMB, SPEX is an examination of "current knowledge requisite for the general, undifferentiated practice of medicine. State boards may require SPEX for endorsement of licensure, reinstatement of a license, or reactivation of a license after a period of inactivity."[11] The FSMB has developed a useful table of state-by-state information regarding licensure of IMGs, updated in August 2022.

American Medical Association

The AMA advocates at the federal and state levels to inform, guide, and generate support for policies that advance initiatives addressing the concerns most relevant to all physicians. Examples of current initiatives relevant to IMGs include supporting the Conrad 30 waiver program, advocating to Congress about the importance of IMGs in the physician workforce, and vetting legislation and monitoring regulations related to IMGs. At the 2023 AMA Advocacy Agenda webinar in January, hosted by the Board of Trustees, AMA staff leaders spoke to the importance of advancing bills to support IMGs.

The AMA's International Medical Graduates Section (IMGS) advocates for issues that impact IMGs, provides resources and assistance, and gives voice and representation to IMGs in the AMA House of Delegates. Resources for IMGs from the section include toolkits, FAQs, and a listing of observership programs, as well as policy and advocacy opportunities.
In 2022, the Council on Medial Education published an issue brief, "Support for IMGs practicing in the US," which addresses potential alternative pathways for licensure for IMGs from select countries including recognition of residency training outside the United States with completion of at least one year of graduate medical education in an accredited U.S. program and unfettered travel for IMGs for the duration of their legal stay in the U.S. in order to complete their residency or fellowship training to prevent disruption of patient care.

RELEVANT AMA POLICIES

The AMA has a number of policies that demonstrate strong support for IMGs during and after training, as well as for those who do not match, as provided in Appendix B. For example:

- Policy H-255.988, "AMA Principles on International Medical Graduates," lists the AMA's position on key IMG issues.
- Policy H-255.966, "Abolish Discrimination in Licensure of IMGs," encourages the FSMB and state medical boards to evaluate the progress of programs aimed at reducing barriers to licensure—including successes, failures, and barriers to implementation.
- Policy D-310.977, "National Resident Matching Program Reform," encourages the ECFMG and other interested stakeholders to study the personal and financial consequences of ECFMG-certified U.S. IMGs who do not match.

SUMMARYAND RECOMMENDATIONS

IMGs face costly and time-consuming steps in their pursuit of U.S. medical training, licensure and practice that are not required of their U.S. MD and DO counterparts. These costs can present barriers and delays to their training and practice that impact IMGs, their training programs and employers, and possibly the health of patients who rely on them for care. Key stakeholders, including the AMA, recognize the additional challenges IMGs face and have been engaged in assisting IMGs in meeting these challenges. The AMA continues to be engaged in such efforts.

The Council on Medical Education therefore recommends that the following recommendations be adopted in lieu of Resolution 305-A-22, and the remainder of this report be filed:

1. That our American Medical Association (AMA) encourage key stakeholders, such as the National Board of Medical Examiners, Federation of State Medical Boards, Educational Commission for Foreign Medical Graduates (a member of Intealth), Cambridge Assessment English and Box Hill Institute, and others to (a) study the most equitable approach for achieving parity across U.S. MD and DO trainees and international medical graduates with regard to application, exam, and licensing fees and related financial burdens; and (b) share this information with the medical education and IMG communities.

2. That our AMA encourage relevant stakeholders to work together to achieve cost equivalency for exams required of all medical students and trainees, including IMGs.

3. That AMA policy H-255.988, "AMA Principles on International Medical Graduates," be reaffirmed.

APPENDIX A - *Medical Education steps and associated costs, 2022-2023*

Requirement	**MD**	**DO**	**IMG**	**Associated costs**
Undergraduate program (average 4 years)	Tuition, books, and related fees. Completion of bachelor's degree, inclusive of prerequisite courses.		• Some countries offer undergraduate programs at no cost. • Some countries allow students to go directly to medical school after high school (i.e., no undergraduate).	Expenses related to travel, housing, meals, health care.
Medical College Admissions Test® (MCAT®)	$330 standard fee $135 FAP* fee $120 nonrefundable international fee (for examinees testing outside the U.S., Canada, or U.S. Territories; in addition to the standard fee).		N/A	Expenses related to test preparation tools/courses
Occupational English Test® (OET)	None	None	$455[d]	Expenses related to test preparation, travel, lodging, etc.

Primary medical school application fee	American Medical College Application Service® (AMCAS®): $170 first school and $43 for each additional school. Some schools do not use AMCAS.	American Association of Colleges of Osteopathic Medicine Application Service (AACOMAS): $198 first school and $50 for each additional school.	N/A	Expenses related to application preparation tools, college service fees (e.g., transmit transcript and/or letters of recommendation.
Secondary application fee	Average $50-100 per school		N/A	
Access to database about medical schools	Many applicants purchase a subscription to Medical School Admission Requirements® (MSAR®) database to learn detailed information about allopathic medical schools. $28 for one-year, $36 for 2 years. Free for FAP*.	The free Choose DO Explorer allows applicant to learn detailed information about osteopathic medical schools.	N/A	
Medical school interviews	Costs may vary depending on whether the interview is virtual or in person. If in person, costs include mode of travel, lodging, attire, and meals per interview location. Costs for virtual interviews include the cost of internet access and the use of a computer or other electronic device.			
Medical school (average 4 years)	Tuition, books, and related fees — inclusive of medical school costs to achieve LCME accreditation.	Tuition, books, and related fees — inclusive of medical school costs to achieve COCA accreditation.	Tuition, books, and related fees — may include medical school costs to achieve accreditation.	Expenses related to travel, housing, meals, health care.
USMLE Step 1/ COMLEX-USA Level 1	$660[4]	$715[5]	• $1,000[3]: exam fees for Step 1 and Step	Expenses related to preparation tools for the United States

USMLE Step 2 CK/ COMLEX-USA Level 2-CE	$660[4]	$715[5]	2 for each exam registration. • $195: Step 1 International Test Delivery surcharge. • $220: Step 2 CK International Test Deliver Surcharge. Additional fees for ECFMG exam chart, Clinical Skills Assessment (CSA) history chart.	Medical Licensing Examination (USMLE) or Comprehensive Osteopathic Medical Licensing Examination of the United States (COMLEX-USA), extension of eligibility period, rescheduling fee, score recheck, transcript, etc.
USMLE Step 3/ COMLEX-USA Level 3	$915	$910	$915 (USMLE Step 3 required for training/practice in US).	
Application for Pathway for ECFMG certification for Match	None	None	$925 Note: Canadian medical school graduates do not need to obtain ECFMG certification since the schools are LCME accredited until June 30, 2025. After such time, graduates will have to be ECFMG certified.	$250 medical school transcript.
ECFMG certification	None	None	$160	$370 annual application fee for J-1 Visa waiver sponsorship for non-U.S. citizens or permanent residents. Additional $220 SEVIS fee, payable to the Department of Homeland Security, is required of initial applicants for J-1 sponsorship.
Application for licensure in state(s) of intended practice	Licensure requirements for domestic and international medical graduates differ between the states.			Expenses related to proof of education, training and licensure exam completion, dues structure, maintenance of licensure, continuing medical education.

Electronic Residency Application Services® (ERAS®)	• $99 (up to 10 programs) • $19 each (11-20) • $23 each (21-30) • $26 each (31 or more)		$165 ERAS token, $80 transcript assessment.
Residency (average 3-7 years)	Varies	Varies Note: All state licensing jurisdictions require a graduate of a foreign medical school to complete at least one year of accredited U.S. or Canadian graduate medical education before licensure.	Expenses related to relocation, travel, housing.
ABMS board certification	Member board certification exam fees vary per board. Some physicians may pursue more than one board.		Expenses related to proof of medical degree from a qualified medical school, completion of 3-5 years of full-time experience in an ACGME-accredited residency program, unrestricted medical license to practice in the U.S. or Canada, continuing board certification and/or recertification.
Fellowship (average 1-3 years)	Varies		Expenses related to relocation, travel, housing.
Credential verification for practice	Many employers require proof of credentials.		

*The AAMC Fee Assistance Program (FAP) assists those who, without financial assistance, would be unable to take the Medical College Admission Test® (MCAT®), apply to medical schools that use the American Medical College Application Service® (AMCAS®), and more. Participation in this program may decrease or eliminate fees above. AACOM has a similar program called Fee Waiver Program.

APPENDIX B - *Relevant AMA Policy*

H-255.988, AMA Principles on International Medical Graduates
Our AMA supports:
1. Current U.S. visa and immigration requirements applicable to foreign national physicians who are graduates of medical schools other than those in the United States and Canada.
2. Current regulations governing the issuance of exchange visitor visas to foreign national IMGs, including the requirements for successful completion of the USMLE.
3. The AMA reaffirms its policy that the U.S. and Canada medical schools be accredited by a nongovernmental accrediting body.
4. Cooperation in the collection and analysis of information on medical schools in nations other than the U.S. and Canada.
5. Continued cooperation with the ECFMG and other appropriate organizations to disseminate information to prospective and current students in foreign medical schools. An AMA member, who is an IMG, should be appointed regularly as one of the AMA's representatives to the ECFMG Board of Trustees.
6. Working with the Accreditation Council for Graduate Medical Education (ACGME) and the Federation of State Medical Boards (FSMB) to assure that institutions offering accredited residencies, residency program directors, and U.S. licensing authorities do not deviate from established standards when evaluating graduates of foreign medical schools.
7. In cooperation with the ACGME and the FSMB, supports only those modifications in established graduate medical education or licensing standards designed to enhance the quality of medical education and patient care.
8. The AMA continues to support the activities of the ECFMG related to verification of education credentials and testing of IMGs.
9. That special consideration be given to the limited number of IMGs who are refugees from foreign governments that refuse to provide pertinent information usually required to establish eligibility for residency training or licensure.
10. That accreditation standards enhance the quality of patient care and medical education and not be used for purposes of regulating physician manpower.
11. That AMA representatives to the ACGME, residency review committees and to the ECFMG should support AMA policy opposing discrimination. Medical school admissions officers and directors of residency programs should select applicants on the basis of merit, without considering status as an IMG or an ethnic name as a negative factor.
12. The requirement that all medical school graduates complete at least one year of graduate medical education in an accredited U.S. program in order to qualify for full and unrestricted licensure. State medical licensing boards are encouraged to allow an alternate set of criteria for granting licensure in lieu of this requirement: (a) completion of medical school and residency training outside the U.S.; (b) extensive U.S. medical practice; and (c) evidence of good standing within the local medical community.
13. Publicizing existing policy concerning the granting of staff and clinical privileges in hospitals and other health facilities.
14. The participation of all physicians, including graduates of foreign as well as U.S. and Canadian medical schools, in organized medicine. The AMA offers encouragement and assistance to state, county, and specialty medical societies in fostering greater membership among IMGs and their participation in leadership positions at all levels of organized medicine, including AMA committees and councils, the Accreditation Council for Graduate Medical Education and its review committees, the American Board of Medical Specialties and its specialty boards, and state boards of medicine, by providing guidelines and non-financial incentives, such as recognition for outstanding achievements by either individuals or organizations in promoting leadership among IMGs.
15. Support studying the feasibility of conducting peer-to-peer membership recruitment efforts aimed at IMGs who are not AMA members.
16. AMA membership outreach to IMGs, to include a) using its existing publications to highlight policies and activities of interest to IMGs, stressing the common concerns of all physicians; b) publicizing its many relevant resources to all physicians, especially to nonmember IMGs; c) identifying and publicizing AMA resources to respond to inquiries from IMGs; and d) expansion of its efforts to prepare and disseminate information about requirements for admission to accredited residency programs, the availability of positions, and the problems of becoming licensed and entering full and unrestricted medical practice in the U.S. that face IMGs. This information should be addressed to college students, high school and college advisors, and students in foreign medical schools.

17. Recognition of the common aims and goals of all physicians, particularly those practicing in the U.S., and support for including all physicians who are permanent residents of the U.S. in the mainstream of American medicine.
18. Its leadership role to promote the international exchange of medical knowledge as well as cultural understanding between the U.S. and other nations.
19. Institutions that sponsor exchange visitor programs in medical education, clinical medicine and public health to tailor programs for the individual visiting scholar that will meet the needs of the scholar, the institution, and the nation to which he will return.
20. Informing foreign national IMGs that the availability of training and practice opportunities in the U.S. is limited by the availability of fiscal and human resources to maintain the quality of medical education and patient care in the U.S., and that those IMGs who plan to return to their country of origin have the opportunity to obtain GME in the United States.
21. U.S. medical schools offering admission with advanced standing, within the capabilities determined by each institution, to international medical students who satisfy the requirements of the institution for matriculation.
22. The Federation of State Medical Boards, its member boards, and the ECFMG in their willingness to adjust their administrative procedures in processing IMG applications so that original documents do not have to be recertified in home countries when physicians apply for licenses in a second state.
23. Continued efforts to protect the rights and privileges of all physicians duly licensed in the U.S. regardless of ethnic or educational background and opposes any legislative efforts to discriminate against duly licensed physicians on the basis of ethnic or educational background.
24. Continued study of challenges and issues pertinent to IMGs as they affect our country's health care system and our physician workforce.
25. Advocacy to Congress to fund studies through appropriate agencies, such as the Department of Health and Human Services, to examine issues and experiences of IMGs and make recommendations for improvements.

H-255.966, Abolish Discrimination in Licensure of IMGs
1. Our AMA supports the following principles related to medical licensure of international medical graduates (IMGs):
A. State medical boards should ensure uniformity of licensure requirements for IMGs and graduates of U.S. and Canadian medical schools, including eliminating any disparity in the years of graduate medical education (GME) required for licensure and a uniform standard for the allowed number of administrations of licensure examinations.
B. All physicians seeking licensure should be evaluated on the basis of their individual education, training, qualifications, skills, character, ethics, experience and past practice.
C. Discrimination against physicians solely on the basis of national origin and/or the country in which they completed their medical education is inappropriate.
D. U.S. states and territories retain the right and responsibility to determine the qualifications of individuals applying for licensure to practice medicine within their respective jurisdictions.
E. State medical boards should be discouraged from a) using arbitrary and non-criteria-based lists of approved or unapproved foreign medical schools for licensure decisions and b) requiring an interview or oral examination prior to licensure endorsement. More effective methods for evaluating the quality of IMGs' undergraduate medical education should be pursued with the Federation of State Medical Boards (FSMB) and other relevant organizations. When available, the results should be a part of the determination of eligibility for licensure.
2. Our AMA will continue to work with the FSMB to encourage parity in licensure requirements for all physicians, whether U.S. medical school graduates or international medical graduates.
3. Our AMA will continue to work with the Educational Commission for Foreign Medical Graduates and other appropriate organizations in developing effective methods to evaluate the clinical skills of IMGs.
4. Our AMA will work with state medical societies in states with discriminatory licensure requirements between IMGs and graduates of U.S. and Canadian medical schools to advocate for parity in licensure requirements, using the AMA International Medical Graduate Section licensure parity model resolution as a resource.
5. Our AMA will: (a) encourage states to study existing strategies to improve policies and processes to assist IMGs with credentialing and licensure to enable them to care for patients in underserved areas; and (b) encourage the FSMB and state medical boards to evaluate the progress of programs aimed at reducing barriers to licensure--including successes, failures, and barriers to implementation.

D-310.977, National Resident Matching Program Reform
Our AMA:
(1) will work with the National Resident Matching Program (NRMP) to develop and distribute educational programs to better inform applicants about the NRMP matching process, including the existing NRMP waiver and violations review policies;
(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, to include making the conditions of the Match agreement more transparent while assuring the confidentiality of the match;
(5) will work with the Accreditation Council for Graduate Medical Education (ACGME) 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 applicants;
(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 NRMP and 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;
(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;

(18) encourages the AAMC, AACOM, NRMP, and other key stakeholders to jointly create a no-fee, easily accessible clearinghouse of reliable and valid advice and tools for residency program applicants seeking cost-effective methods for applying to and successfully matching into residency; and
(19) will work with appropriate stakeholders to study options for improving transparency in the resident application process.

Additional IMG policies:
H-255.978, Unfair Discrimination Against International Medical Graduates
D-295.988(3a-c), Clinical Skills Assessment During Medical School
D-255.991, Visa Complications for IMGs in GME
D-255.977, Licensure for International Medical Graduates Practicing in U.S. Institutions with Restricted Medical Licenses
D-275.950, Retirement of the National Board of Medical Examiners Step 2 Clinical Skills Exam for US Medical Graduates: Call for Expedited Action by the American Medical Association
H-255.968, Advance Tuition Payment Requirements for International Students Enrolled in US Medical Schools
D-255.985, Conrad 30 - J-1 Visa Waivers
D-295.960, Clinical Skills Training in Medical Schools D-295.960

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4. DECREASING BIAS IN ASSESSMENTS OF MEDICAL STUDENT CLINICAL CLERKSHIP PERFORMANCE (RESOLUTION 309-A-22, RESOLVE 2)

Reference committee hearing: see report of Reference Committee C.

HOUSE ACTION: RECOMMENDATIONS ADOPTED
IN LIEU OF RESOLVE 2 OF RESOLUTION 309-A-22
REMAINDER OF REPORT FILED
See Policies D-295.307, D-295.317, D-295.318, H-295.851 and H-295.866

Resolution 309-A-22, "Decreasing Bias in Evaluations of Medical Student Performance," was introduced by the Medical Student Section at the 2022 Annual Meeting of the American Medical Association (AMA). While Resolve 1 was adopted into AMA Policy D-295.307, Resolve 2 was referred for study. The referred clause asked that our AMA:

> Study the impact of two-interval clinical clerkship grading systems on residency application outcomes and clinical performance during residency.

Testimony emphasized the current difficulty in accessing data needed to inform such a study and work underway via the AMA ChangeMedEd initiative toward longitudinal tracking. Testimony also highlighted challenges faced by program directors, the delicate balance of wanting more data versus ensuring unbiased data, and equity concerns regarding current grading models and diverse learners. Reference Committee C and the House of Delegates (HOD) felt that these concerns warranted further study. This report is in response to this referral.

BACKGROUND

Clinical Clerkships and Two-Interval Grading

In clinical clerkships, medical students are immersed in learning experiences involving direct patient care and application of clinical sciences.[1] This comprises both core and elective rotations, beginning in the third year of medical school, and with significant variability between clerkship experiences based on seasonal infectious disease cycles, electives chosen, and other considerations.

Two-interval grading refers to grading structures with only two options, either pass or fail, though these grades may also be accompanied by narrative information. Two-interval pass/fail grading is distinct from generalized pass/fail grading insofar as some pass/fail grading structures offer opportunities for grading with honors and other hierarchies, such as "high pass," as opposed to the binary pass/fail. While AMA Policy H-295.866, "Supporting Two-Interval Grading Systems for Medical Education," encourages "the establishment of a two-interval grading system in medical colleges and universities in the United States for the non-clinical curriculum," current policy does not address clinical curriculum.

Competency-Based Medical Education and the "Growth Mindset"

The current rationale for two-interval grading centers around learner trust and growth within the move toward competency-based medical education, or CBME (see also AMA policy D-295.317). Specifically, for medical education to focus on outcomes via a developmental approach, vulnerability for learners must be acknowledged and institutional culture must demonstrate trustworthiness, as learner gaps and needs may only be addressed if acknowledged rather than hidden due to performance pressure.[2] Thus, two-interval pass/fail frees the learner from striving for a specific performative grade, allowing more transparency around gaps. This redirects focus to effectively meeting required competencies (passing) after careful consideration of areas for improvement, rather than concealing difficulties to rank higher. Equity between learners is complex and not inherently achieved by grading system changes alone, as discussed in later sections. Biases related to race, gender, disability, or other factors exist in a wider societal structure, and interventions require a multi-pronged approach.[3] However, even highly rigorous and non-biased assessments would drive undesired behaviors (concealment versus transparency toward growth) if graded or ranked.[4] Nonetheless, larger medical education and societal structures currently create a demand for ranking, as discussed below.

Applicant Selection Challenges

A significant concern regarding possible elimination of tiered rankings in clerkship grades involves the increasing number of residency applications and growing challenges for programs when selecting from an overwhelming number of candidates. The United States Medical Licensing Examination® (USMLE®) Step 1 examination's shift to pass/fail in January 2022 sparked concerns in this regard from residency program directors: a study of internal medicine program directors found that, in the absence of graded Step 1 examination scores, program personnel would be increasingly likely to weight such variables as ranked clerkship grades, Step 2 exam scores, personal knowledge of the applicant, and audition electives; respondents also expressed the belief that osteopathic applicants may potentially be further disadvantaged.[5] Data regarding actual impact is unknown because not enough time has passed. Without an overhaul of the application process and infrastructure supportive of the time necessary for holistic review of applicants[6] or transition away from competition-based processes (i.e., randomization via lottery), eliminating rankings in certain areas may indeed pose challenges. However, clerkship grades are an unreliable measure for evaluating residency applicants and challenged by inconsistencies and bias, as further described in the next section.

Unreliability and Variability in Clinical Clerkship Grades

Despite perceptions of their importance in selecting program applicants, clinical clerkship grades are generally found to be inconsistent and unreliable.[7] In one study, most students believed that clerkship grades were unfair and that being liked by specific supervisors most influenced grading[8]; further data confirms the detachment of clerkship grades from useful assessment criteria. One study noted that most medical schools used a four-tier system of fail, pass, high pass, or honors, but all defined these words subjectively and inconsistently, even within the same programs; this variability across schools and even within programs poses a challenge to accurate stratification of applicants.[9] U.S. News & World Report Top 20 medical schools were also more likely to disproportionately assign the highest clerkship grade to a higher percentage of students than other medical schools,[10] even though these schools were also less likely to implement grade comparison at all.[11] Clerkship grades often suggest the "illusion of objectivity," despite no standard approach to assigning grades or rank, flawed data not based on actual observations, high stress for students, and time-based grading paradigms that promote inequities.[12]

Equity and Diversity Concerns Within Medical School Assessment

Beyond concerns of general unreliability, equity and diversity concerns also arise within clinical clerkship assessment. One 2018 study (which defined "underrepresented in medicine" narrowly as students from the racial or ethnic groups Black, Latina/o/x, Native American, and Alaska Native) demonstrated differences in clerkship director ratings that consistently favored non-underrepresented students, and while these differences were small, they created an amplification cascade later in the educational experience, compounding challenges already faced by these students due to structural racism.[13] Another 2019 study demonstrated that, even after accounting for confounding variables, grades were more likely to favor white students above both underrepresented and non-underrepresented students of color.[14] Even prior to grading itself, the training environment and overall social environment already hinders students from marginalized racial/ethnic groups, depleting cognitive resources and interfering with learning,[15] such that even with more "objective" grading standards, societal bias already creates an inequitable environment for learning. Finally, while research that addresses the specific topic of clinical clerkship assessment for other marginalized identities/experiences is limited, learners are subjected to systemic biases in many realms, such as LGBTQ issues,[16] socioeconomic status[17], and disability.[18]

DISCUSSION

Course grades perform two purported functions: giving students a summative evaluation of their course performance and providing a standardized means of communicating student performance to third parties. Grades should be distinguished from formative assessments, which are focused on improving student learning. As a summative evaluation, grades should be based on valid and reliable data and contain sufficient information to be useful to students and third parties, with attention to the ways larger systemic bias and inequitable assignment of merit influences even otherwise reliable data.[19] Current data demonstrated above indicates significant reliability concerns in current grading systems.

Little data exists to demonstrate the impact of two-interval clinical clerkship grading on residency application outcomes and clinical performance during residency, and even less data that includes analysis by race, gender, socioeconomic class, disability, or other relevant demographics. This report seeks to split the question into its various components, provide background on how some data is collected and reported, offer currently available research, and offer suggestions on how this data might be gathered in the future.

Current Data and Challenges Regarding Pass/Fail in Clinical Clerkships

Much current research suggests that two-interval pass/fail grading systems improve learner well-being in the preclinical years,[20] and academic performance remains similar, with an increased opportunity for a reduction of stress and less competitive learning environment.[21] Proponents of CBME also generally advocate to reframe two-interval pass/fail as two-interval "only pass/not yet pass" and to utilize criterion-referenced assessment such that learners will pass in time.[22] Support for CBME is inherently linked to removing hierarchical grading structures in all aspects of medical education.[23]

Data around usage of pass/fail grading systems in clinical clerkships is collected by the Liaison Committee on Medical Education (LCME) for allopathic schools and by the American Association of Colleges of Osteopathic Medicine (AACOM) for osteopathic schools, but few analyses of impact exist.

The LCME's files indicated the following data for each portion of the curriculum:

LCME Part II Totals: Type of Grading System Used (2019-2020)			
Grading system	**Required clinical clerkships**	**Fourth-year selectives/sub-internships**	**Electives**
Pass-fail	11	32	84
Honors-pass-fail	26	27	21
Honors-high pass-pass-fail	85	68	57
Numerical grade	6	1	0
Letter grade	24	19	10
Other	13	8	7

LCME Part II Totals: Type of Grading System Used (2020-2021)			
Grading system	**Required clinical clerkships**	**Fourth-year selectives/sub-internships**	**Electives**
Pass-fail	24	37	92
Honors-pass-fail	25	27	22
Honors-high pass-pass-fail	81	72	54
Numerical grade	7	4	7
Letter grade	20	18	9
Other	11	10	12

LCME Part II Totals: Type of Grading System Used (2021-2022)			
Grading system	**Required clinical clerkships**	**Fourth-year selectives/sub-internships**	**Electives**
Pass-fail	20	37	90
Honors-pass-fail	26	27	18
Honors-high pass-pass-fail	82	73	55
Numerical grade	3	0	0
Letter grade	19	15	10

Other	9	8	10

As seen above, within required clinical clerkships, two-interval pass/fail accounted for only about seven percent of grading systems in 2019-2020 and 14 percent in 2020-2021, with a slight decline in 2021-2022 to 20 schools out of 155, or about 13 percent. In fourth-year medical selective rotations, two-interval pass/fail grading systems accounted for about 21 percent in 2019-2020, 22 percent in 2020-2021, and 23 percent in 2021-2022. Elective clerkships were more likely to be two-interval pass/fail than other clerkships, as this accounted for about 47 percent of grading systems in both 2019-2020 and 2020-2021, and about 49 percent in 2021-2022.

The most recent AACOM data available showed that 28 schools used pass/fail to grade required clinical clerkships, while 21 schools used pass/fail for elective/selective grading.[24] However, this data reflects multi-interval pass/fail variants including honors and does not indicate which, if any, use two-interval grading. Looking closer, a 2020 study of transcripts indicated that osteopathic medical schools' grading system distribution in clinical years was 59.5 percent honors, 29.7 percent letter grade, and 10.8 percent other systems. Only one of the 37 osteopathic medical schools participating in this study used two-interval pass/fail systems without tiered indicators such as "high pass" in the clinical years.[25] This study demonstrated the variability between grading systems, both within and between allopathic and osteopathic schools, and the rarity of two-interval pass/fail in clerkship years.

Given limited implementation of two-interval pass/fail, research on the impact of this grading mechanism is even more limited. In 2021, faculty from one institution responded to the elimination of tiered clerkship grades with optimism for well-being and the learning environment, as well as hesitations, such as lack of readiness for hierarchies in later educational structures and concerns about the residency selection process.[26] Students in a different 2021 qualitative study shared that implementation of two-interval pass/fail core clerkship grading, in combination with enhanced formative feedback, resulted in benefits to intrinsic motivation, increased ability to seek feedback and improvements, lowered stress, and perceived mitigation of equity concerns.[27] However, this perceived mitigation was not confirmed with outcomes-based data, nor are these perceptions disaggregated by respondent demographics. In another study from 2022, transitioning to two-interval clinical clerkship grades with enhanced feedback was related to moderate to large improvements in students' perceptions of grading and the learning environment, toward that of "mastery-oriented learning" rather than performative behavior. Simultaneously, deeper learner concerns around bias in evaluators and inequitable narrative summaries remained.[28]

Current Clinical Clerkship Recommendations for Eliminating Grading Bias

Grappling with known equity issues, the Alliance for Academic Internal Medicine's 2021 report, "Aiming for Equity in Clerkship Grading: Recommendations for Reducing the Effects of Structural and Individual Bias" indicated the scarcity of evidence-based resources for eliminating bias in clinical clerkship grading. Using a socioecological model, the authors suggest several possible interventions for further implementation and study, including but not limited to faculty development, non-normative competency-based grading, and refraining from standardized cut-off scores to designate honors in grading, though recommendations do not explicitly suggest removal of honors within grading.[29]

Also regarding systemic bias concerns in grading, the Coalition for Physician Accountability's Undergraduate Medical Education-Graduate Medical Education Review Committee recommended the following in 2021: "To eliminate systemic biases in grading, medical schools must perform initial and annual exploratory reviews of clinical clerkship grading, including patterns of grade distribution based on race, ethnicity, gender identity/expression, sexual identity/orientation, religion, visa status, ability, and location (e.g., satellite or clinical site location), and perform regular faculty development to mitigate bias. Programs across the UME-GME continuum should explore the impact of bias on student and resident evaluations, match results, attrition, and selection to honor societies."[30]

In 2022, Russo et al. demonstrated the bias present within clinical clerkship grades and suggested that two-interval pass/fail grading as one component may mitigate the impact of bias, though it will not eliminate bias itself. "Shifting to a competence-based assessment model will give the learner multiple opportunities over time to demonstrate their mastery of skills and knowledge, thereby reducing the power of a single biased assessment."[31]

Due to the complexities of bias within clinical clerkship grading systems, the need for innovation is clear, but additional evidence is required to understand whether two-interval pass/fail grading effectively addresses these challenges.

Current Data and Challenges Regarding Pass/Fail and Residency Application Outcomes

When considering how to understand the impact two-interval pass/fail in clinical clerkships may have on residency application outcomes, especially regarding bias and equity, one must first consider what data is needed, and how this data is currently collected.

Match results from applications to residency programs are reported in aggregate by both the National Resident Matching Program (NRMP) and by medical schools. While it might be possible to determine some correlation between the schools that use two-interval pass/fail in clinical clerkships and their aggregate Match results, all other confounding factors would need to be considered, including other aspects of the school and all other determining factors considered in applications, both on larger-scale and individual learner levels. When also considering learner diversity and any potential impacts of bias, information would need to be disaggregated into multiple categories, such as race, ethnicity, disability, gender identity, sexual orientation, socioeconomic status, and more. Some of this information is currently collected in aggregate ways, such as through the Association of American Medical Colleges' (AAMC) Medical School Graduation Questionnaire,[32] but not all aspects of bias are addressed; these results are not tied to specific application outcomes or individuals due to privacy concerns. Further insights on two-interval pass/fail grading systems' impact on bias in residency application outcomes would require the limited number of schools with two-interval pass/fail in clinical clerkship to study this specifically, comparing archival data before two-interval grading with current data, and with a student population large enough to ensure confidentiality for participants. This data would then need to be published. Multiple schools would need to achieve this to provide sufficient numbers to allow for comparison between institutions, and between allopathic versus osteopathic programs.

Outside of medical schools, in a related field, a 2019 study found that for Doctor of Pharmacy students within advanced pharmacy practice experiences, there was little statistical difference in residency match rates between applicants with two-interval pass/fail grades and tiered grades to assess clinical experiences. However, pharmacy education exists in a different context than medical education, and extrapolations cannot necessarily be made.

As discussed in earlier sections, it is well-known that bias is a concern in residency application outcomes. A 2019 study found no statistically significant differences in residency application outcomes in one institution when pre-clinical grades are pass/fail,[33] but no such research currently exists for clinical clerkships. Current research merely indicates that clinical clerkship grades overall are not useful for ranking residency applications.[34] A 2021 study suggested that receiving honors in clinical clerkship grading contributed to matching into the applicant's top five programs in OB/GYN[35] where honors were available, but that minority and male students were less likely to receive honors, suggesting further need for research into grading disparities.

Residency programs must currently create a rank list of applicants for admission, and in numerous specialties and for many residency programs, the number of qualified applicants to be evaluated greatly exceeds the number of positions available. Medical school clerkship grades are among several factors used by residency programs to determine the ranking of applicants. Though these grades are currently unreliable, as discussed above, conversion to two-interval pass/fail grading systems for clerkships without other interventions will require residency programs to weigh other data points more heavily when reviewing applications, such as recommendation letters or perceived medical school reputation. It is uncertain if these alternative factors are more valid or subject to less bias than clerkship grades, and the impacts on diverse student groups are still uncertain. While further knowledge is gathered, medical schools can invest in improving their grading systems to decrease bias, provide transparency to residency programs regarding their grading system methodologies, and invest in methods of providing more useful information to residency programs.

Current Data and Challenges Regarding Longitudinal Tracking into Residency

Additional challenges arise when seeking data on how two-interval pass/fail grades in clinical clerkship and bias may impact residency performance outcomes. For longitudinal tracking into residency, current data sources include feedback from program directors to school deans, either sent by the school or coordinated by the AAMC Resident Readiness Survey.[36] However, information published by the AAMC does not track comparatively across schools, and even comparative school data would need to account for confounding factors, not merely each school's clinical

clerkship grading system. As with application outcome challenges, residency performance outcome challenges also include the need to collect and disaggregate demographic information for learners without violating learner privacy. There is currently no pre-existing research to draw from on the direct impact of two-interval pass/fail clinical clerkship grading systems on residency performance outcomes, with or without the consideration of equity and bias. One 2019 study that begins to approach the topic is a meta-analysis of program directors' perceptions of residency performance among residents from schools using two-interval pass/fail versus tiered clerkship grading, which found no significant difference in perceptions of overall performance between these groups.[37] However, perceptions of performance do not inherently translate to actual actions taken nor actual criterion-referenced performance and carry the additional limitation of reflecting only on those who were already admitted into residency.

Some progress has been made on overall development of longitudinal tracking, though not related to these topics specifically. For instance, the AMA Accelerating Change in Medical Education Consortium created a personalized graduate profile for 32 medical schools, addressing three core questions of workforce, clinical exposure, and quality of care. This may serve as "a proof of concept" for further research into the topics of this report.[38] The Accreditation Council for Graduate Medical Education (ACGME) also collects milestone data by specialty,[39] but this data is not currently compared with data on pass/fail grading systems in clinical clerkships. There is also evidence to suggest that racial and ethnic biases may impact milestone levels. For instance, a 2022 study in pediatric programs found race and gender disparities in assessments of trainees in residency programs.[40]

RELEVANT AMA POLICY

The AMA has extensive policy related to grading systems and mitigating bias in medical education. Some examples are as follows:

- D-200.985, "Strategies for Enhancing Diversity in the Physician Workforce," recommends that residency/fellowship programs use holistic assessments of applicants that take into account the diversity of preparation and the variety of talents that applicants bring to their education.
- D-310.945, "Mitigating Demographic and Socioeconomic Inequities in the Residency and Fellowship Selection Process," encourages medical schools, medical honor societies, and residency/fellowship programs to work toward ethical, equitable, and transparent recruiting processes, which are made available to all applicants.
- D-295.988, "Clinical Skills Assessment During Medical School," works 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.
- D-295.317, "Competency Based Medical Education Across the Continuum of Education and Practice," continues 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.
- D-295.318, "Competency-Based Portfolio Assessment of Medical Students," develops pilot projects to study the impact of competency-based frameworks on student graduation, the residency match process, and off-cycle entry into residency programs.
- D-295.963, "Continued Support for Diversity in Medical Education," works with appropriate stakeholders to commission and enact the recommendations of a forward-looking, cross-continuum, external study of 21st century medical education focused on reimagining the future of health equity and racial justice in medical education.
- D-295.307, "Decreasing Bias in Evaluations of Medical Student Performance," works with appropriate stakeholders to promote efforts to evaluate methods for decreasing the impact of bias in medical student performance evaluation as well as reducing the impact of bias in the review of disciplinary actions.
- D-295.983, "Fostering Professionalism During Medical School and Residency Training," continues to study the clinical training environment to identify the best methods and practices used by medical schools and residency programs to foster the development of professionalism.
- H-350.979, "Increase the Representation of Minority and Economically Disadvantaged Populations in the Medical Profession," supports increasing the representation of minorities in the physician population.
- D-295.322, "Increasing Demographically Diverse Representation in Liaison Committee on Medical Education Accredited Medical Schools," studies medical school implementation of the Liaison Committee on Medical Education (LCME) Standard IS-16 and share the results with appropriate accreditation organizations and all state medical associations for action on demographic diversity.

- H-295.866, "Supporting Two-Interval Grading Systems for Medical Education," works with stakeholders to encourage the establishment of a two-interval grading system in medical colleges and universities in the United States for the non-clinical curriculum.

These policies are listed in full detail in Appendix A.

SUMMARY AND RECOMMENDATIONS

Fair and equitable assessment in medical school improves career opportunities for medical students and benefits the public which deserves a more diverse physician workforce. Grades are one form of summative assessment of student performance, and summative assessment should provide third parties with important information about learner competencies and readiness. Current research demonstrates that despite the weighting of clinical clerkship grades in residency applicant selection, these grades are currently inconsistent, unreliable, and biased. Thus, medical schools should invest in developing valid, reliable, unbiased, and informative assessments for clerkships. Two-interval pass/fail clinical clerkship grading systems are rare in allopathic and osteopathic schools alike, and understanding their impacts on residency application outcomes and clinical performance during residency, especially from an equity lens, will require significant effort by researchers and medical education stakeholders. Efforts toward longitudinal tracking in general are also still in the early stages. However, both AMA policy and pre-existing research do support overall well-being and learning environment improvements related to two-interval pass/fail grading systems in the pre-clinical years. Not all schools have implemented this grading structure, and continued encouragement to do so is warranted.

Learners, including learners experiencing systemic oppression in one or many domains, are not a monolith, and the need for nuance is paramount as these issues are addressed. Inequity in clinical clerkship assessment may be one symptom of the wider culture of systemic bias as well as a reflection of the current learning environment of competition within medical education. The "bottleneck" within the popularity of certain specialties over others also amplifies the competitive environment. Without a greater shift within medical education's values, or without tending to the entire landscape of medical education, modifying one component piece may send varying intended and unintended ripple effects outwards to the other components of learner assessment—potentially shifting pressure and bias from one area to another, and having unknown and heterogeneous effects on a variety of learners. It is difficult to assess only one piece of the overall system to reflect an understanding of overall equity in assessment, and even more challenging to correct only one piece of a much wider puzzle. Despite these challenges, further gathering of data and the exploration of innovations across the continuum of medical education is beneficial, with an emphasis on attention to the needs of unique populations, especially those that are underrepresented in medicine or experience bias. An evidence base for best practices and interventions can and should be gathered. Strategies must focus on the wider whole, including evaluating the benefits and challenges of moving to a competency-based system with equity at the forefront, rather than a time-based and competitive system.

The Council on Medical Education therefore recommends that the following recommendations be adopted in lieu of Resolution 309-A-22, Resolve 2, and the remainder of this report be filed:

That our American Medical Association (AMA):

1. Continue to encourage work in support of the Coalition for Physician Accountability's Undergraduate Medical Education-Graduate Medical Education Review Committee "Recommendations for Comprehensive Improvement of the UME-GME Transition."

2. Encourage and support UME institutions' investment in a) developing more valid, reliable, and unbiased summative assessments for clinical clerkships, including development of assessors' awareness regarding structural inequities in education and wider society, and b) providing standardized and meaningful competency data to program directors.

3. Encourage institutions to publish information related to clinical clerkship grading systems and residency match rates, with subset data for learners from varied groups, including those that have been historically underrepresented in medicine or may be affected by bias.

4. Encourage UME institutions to include grading system methodology with grades shared with residency programs.

5. Reaffirm the following policies:

- D-295.307, "Decreasing Bias in Evaluations of Medical Student Performance"
- H-295.866, "Supporting Two-Interval Grading Systems for Medical Education"
- D-295.317, "Competency Based Medical Education Across the Continuum of Education and Practice"
- D-295.318, "Competency-Based Portfolio Assessment of Medical Students"

APPENDIX A: 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 and residency/fellowship programs use holistic assessments of applicants that take into account the diversity of preparation and the variety of talents that applicants bring to their education with the goal of improving health care for all communities.
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.
13. Our AMA will work with the AAMC and other stakeholders to create a question for the AAMC electronic medical school application to identify previous pipeline program (also known as pathway program) participation and create a plan to analyze the data in order to determine the effectiveness of pipeline programs.

Mitigating Demographic and Socioeconomic Inequities in the Residency and Fellowship Selection Process D-310.945
Our AMA will: 1. encourage medical schools, medical honor societies, and residency/fellowship programs to work toward ethical, equitable, and transparent recruiting processes, which are made available to all applicants.
2. advocate for residency and fellowship programs to avoid using objective criteria available in the Electronic Residency Application Service (ERAS) application process as the sole determinant for deciding which applicants to offer interviews.
3. advocate to remove membership in medical honor societies as a mandated field of entry on the Electronic Residency Application Service (ERAS)—thereby limiting its use as an automated screening mechanism—and encourage applicants to share this information within other aspects of the ERAS application.
4. advocate for and support innovation in the undergraduate medical education to graduate medical education transition, especially focusing on the efforts of the Accelerating Change in Medical Education initiative, to include pilot efforts to optimize the residency/fellowship application and matching process and encourage the study of the impact of using filters in the Electronic Residency Application Service (ERAS) by program directors on the diversity of entrants into residency.
5. encourage caution among medical schools and residency/fellowship programs when utilizing novel online assessments for sampling personal characteristics for the purpose of admissions or selection and monitor use and validity of these tools.

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.

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.

Competency-Based Portfolio Assessment of Medical Students D-295.318
1. Our AMA will work with the Association of American Medical Colleges, the American Osteopathic Association and the Accreditation Council for Graduate Medical Education, and other organizations to examine new and emerging approaches to medical student evaluation, including competency-based portfolio assessment.
2. Our AMA will work with the NRMP, ACGME and the 11 schools in the AMA's Accelerating Change in Medical Education consortium to develop pilot projects to study the impact of competency-based frameworks on student graduation, the residency match process and off-cycle entry into residency programs.

Continued Support for Diversity in Medical Education D-295.963
Our AMA will: (1) publicly state and reaffirm its stance on diversity in medical education; (2) request that the Liaison Committee on Medical Education regularly share statistics related to compliance with accreditation standards IS-16 and MS-8 with medical schools and with other stakeholder groups; (3) work with appropriate stakeholders to commission and enact the recommendations of a forward-looking, cross-continuum, external study of 21st century medical education focused on reimagining the future of health equity and racial justice in medical education, improving the diversity of the health workforce, and ameliorating inequitable outcomes among minoritized and marginalized patient populations; and (4) advocate for funding to support the creation and sustainability of Historically Black College and University (HBCU), Hispanic-Serving Institution (HSI), and Tribal College and University (TCU) affiliated medical schools and residency programs, with the goal of achieving a physician workforce that is proportional to the racial, ethnic, and gender composition of the United States population.

Decreasing Bias in Evaluations of Medical Student Performance D-295.307
Our AMA will work with appropriate stakeholders to promote efforts to evaluate methods for decreasing the impact of bias in medical student performance evaluation as well as reducing the impact of bias in the review of disciplinary actions.

Fostering Professionalism During Medical School and Residency Training D-295.983
(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, to include an evaluation of professional behavior, carried out at regular intervals and employing methods shown to be valuable in adding to the information that can be obtained from observational reports. An ideal system would utilize multiple evaluation formats and would build upon educational experiences that are already in place. The results of such evaluations should be used both for timely feedback and appropriate interventions for medical students and resident physicians aimed at improving their performance and for summative decisions about progression in training.

Increase the Representation of Minority and Economically Disadvantaged Populations in the Medical Profession H-350.979
Our AMA supports increasing the representation of minorities in the physician population by: (1) Supporting efforts to increase the applicant pool of qualified minority students by: (a) Encouraging state and local governments to make quality elementary and secondary education opportunities available to all; (b) Urging medical schools to strengthen or initiate programs that offer special premedical and precollegiate experiences to underrepresented minority students; (c) urging medical schools and other health training institutions to develop new and innovative

measures to recruit underrepresented minority students, and (d) Supporting legislation that provides targeted financial aid to financially disadvantaged students at both the collegiate and medical school levels.
(2) Encouraging all medical schools to reaffirm the goal of increasing representation of underrepresented minorities in their student bodies and faculties.
(3) Urging medical school admission committees to consider minority representation as one factor in reaching their decisions.
(4) Increasing the supply of minority health professionals.
(5) Continuing its efforts to increase the proportion of minorities in medical schools and medical school faculty.
(6) Facilitating communication between medical school admission committees and premedical counselors concerning the relative importance of requirements, including grade point average and Medical College Aptitude Test scores.
(7) Continuing to urge for state legislation that will provide funds for medical education both directly to medical schools and indirectly through financial support to students.
(8) Continuing to provide strong support for federal legislation that provides financial assistance for able students whose financial need is such that otherwise they would be unable to attend medical school.

Increasing Demographically Diverse Representation in Liaison Committee on Medical Education Accredited Medical Schools D-295.322
Our AMA will continue to study medical school implementation of the Liaison Committee on Medical Education (LCME) Standard IS-16 and share the results with appropriate accreditation organizations and all state medical associations for action on demographic diversity.

Supporting Two-Interval Grading Systems for Medical Education H-295.866
Our AMA will work with stakeholders to encourage the establishment of a two-interval grading system in medical colleges and universities in the United States for the non-clinical curriculum.

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5. SUPPORT FOR INSTITUTIONAL POLICIES FOR PERSONAL DAYS FOR UNDERGRADUATE MEDICAL STUDENTS (RESOLUTION 314-A-22)

Reference committee hearing: see report of Reference Committee C.

HOUSE ACTION: RECOMMENDATIONS ADOPTED
IN LIEU OF RESOLUTION 314-A-22
REMAINDER OF REPORT FILED
See Policy H-295.850

Resolution 314-A-22, "Support for Institutional Policies for Personal Days for Undergraduate Medical Students," was authored by the American Medical Association (AMA) Medical Student Section and submitted to the 2022 Annual Meeting of the House of Delegates (HOD). The resolution reads as follows:

> RESOLVED, That our American Medical Association encourage medical schools to accept flexible uses for excused absences from clinical clerkships (New HOD Policy); and be it further
>
> RESOLVED, That our AMA support a clearly defined number of easily accessible personal days for medical students per academic year, which should be explained to students at the beginning of each academic year and a subset of which should be granted without requiring an explanation on the part of the students. (New HOD Policy)

The resolution was subsequently referred by the HOD for a report back to the House; this report is in response to the referral.

BACKGROUND

Concerns expressed by the resolution's author

The resolution stresses the frequency of burnout and its impact on the professional development and mental health of medical students and identifies a lack of protected time as the prominent barrier preventing medical students from accessing mental health treatment. The author expresses concern regarding the inconsistency and lack of standardization of institutional policies for the implementation of excused absences and the level of disclosure required by the students, recognizing that students may not feel comfortable sharing mental health concerns due to professional stigma, shame, or fear of repercussion.

Reference Committee C testimony on the resolution

The Reference Committee C report at the 2022 Annual Meeting reflected mixed testimony on this item of business. Some testimony indicated support for this resolution, while others recommended referral for further study due to concerns that using excessive personal days during a given clerkship would have significant repercussions on the quality of education. While there was support for the use of personal days by medical students, it was noted that determining a defined number of personal days per academic year may be difficult given the variances across medical schools. For these reasons, the resolution was recommended for referral by the reference committee; the HOD subsequently concurred with this recommendation.

Council on Medical Education testimony on the resolution

In its testimony, the AMA Council on Medical Education stated that the AMA has a large amount of policy on burnout in medical students, but nothing specific to personal days or less restrictive excused absences. The Council

recommended that the resolution be amended by adding the language of the first resolve to current policy D-310.968 (3), "Physician and Medical Student Burnout," and adding a new resolve that the AMA support a clearly defined number of easily accessible personal days for medical students per academic year, which should be explained to students at the beginning of each academic year and a subset of which should be granted without requiring an explanation on the part of the students. The Council recognized the possibility of misuse of these days but noted that providing for but limiting the number of personal days provides for both greater flexibility as well as privacy for students.

DISCUSSION

The goal of undergraduate medical education and awarding of the medical degree is to ensure that medical students have acquired the knowledge, skills, and professional behaviors that prepare them for a spectrum of career choices in medicine. Medical schools need to create an educational environment that assures that graduating medical students meet the standards for achieving the medical degree with the flexibility to meet the individual needs of their students.

Time constraints as a barrier to medical student mental health care and well-being

Burnout among medical students and the need for initiatives to counter burnout are well-documented. Approximately half of U.S. medical students report experiencing burnout, and medical students are more likely than their same-age peers outside of medicine to experience depression or depressive symptoms (a prevalence of 27.2 percent)[1] and suicidal ideation (overall prevalence of 11.1 percent).[2] Until recently, studies into obtaining timely mental health care treatment and obstacles to care for students have been limited. However, one of the most frequently cited barriers in this earlier research is lack of time.[3]

To gain a more thorough understanding, the University of Michigan conducted a study in 2020 of current and recently graduated medical students, including pre-clinical, core clinical, and clinical elective students. The goal of the study was to identify rates of burnout, barriers to treatment, and program preferences for medical students.[4] The results demonstrated the negative impact that lack of time had on medical student access to mental health services as time constraints were the most commonly reported barrier to accessing care. Of the participants who identified barriers to obtaining care (77 of 312 respondents), 60 percent noted lack of time. In addition, 43 percent of respondents felt that their schedule did not leave them with enough time for personal or family life, another aspect of well-being impacted by time constraints. Students in the study were given the option to provide suggestions for improvement, with flexibility in pre-clinical and core clerkship schedules the most frequently mentioned theme.

Concerns regarding stigma and potential career impact

Stigma and fear of professional consequences also influence whether medical students seek mental health treatment. In a 1994 study of first- and second-year medical students at the University of California, San Francisco, School of Medicine, approximately one third of the students identified as depressed cited the stigma associated with using mental health services and lack of confidentiality as reasons for not seeking treatment.[3] (The questionnaire was constructed to identify the medical students' severity of depression by using the 13-item Beck Depression Inventory, a standardized measure of depression symptoms.) In a 2009 cross-sectional student survey at a large Midwestern medical school, most students cited potential embarrassment and the adverse effects that disclosing mental illness could have on their professional development.[5]

The 2020 University of Michigan study also identified similar sentiments among its medical students. The aspect of mental health services that students most endorsed was the guarantee that seeking mental health care would have no negative impact on a student's future career (78 percent). The study noted that policies concerning the reporting of mental health treatment to residency programs and questions asked by licensing boards are variable and unclear, with many students avoiding treatment for fear that future employers would view such treatment unfavorably.[4]

Medical education accreditation standards related to student mental health

The Liaison Committee on Medical Education (LCME) and the Commission on Osteopathic College Accreditation (COCA) have assessed the need for addressing medical student mental health and have issued specific requirements on standards for accreditation to allopathic and osteopathic medical schools, respectively.

LCME standards (Element 12.3 – Personal Counseling/Mental Health/Well-Being Programs, Element 12.4 – Student Access to Health Care Services, and Element 12.5 Non-Involvement of Providers of Student Health Services in Student Assessment/Location of Student Health Records) require that health professionals providing any services, including psychiatric or psychological counseling, should not be involved in the academic assessment or promotion of students in a medical school program. Legal requirements for security, privacy, confidentiality, and accessibility should be met when maintaining medical student health records. Furthermore, these standards state that diagnostic, preventive, and therapeutic health services must be accessible to medical school students near the site of their required educational experiences, which may include classroom facilities, rotation sites, etc. Policies should be in place that allow students to be excused to seek necessary health care.[6]

COCA standards (Element 5.3 – Safety, Health, and Wellness, Element 9.8 – Mental Health Services, and Element 9.9 Physical Health Services) require that medical schools publish and follow policies related to student, faculty, and staff mental health and wellness and fatigue mitigation; provide students with confidential access to an effective system of counseling and mental health care, with a mental health representative accessible 24 hours a day, 365 days a year, from all locations where students receive education from the medical school; and provide students with access to diagnostic, preventive, and therapeutic health services 24 hours a day, 365 days a year, accessible in all locations where students receive education from the medical school.[7]

Medical school attendance policies and impact of absences on education

Medical school policies regarding excused absences and the use of personal days vary as schools set policy to fit their specific curriculum structure. Therefore, standardization of these policies would prove difficult.

In a sampling of medical school attendance policies regarding health-related excused absences,[8-15] acceptable reasons included: illness affecting one's ability to report to the scheduled session and necessary health care services which cannot be rescheduled, such as preventive health services, care for chronic illnesses, physical therapy, and counseling/psychological services. In some instances, students were not required to disclose the specific type of health care being sought. Students were strongly encouraged to schedule non-emergency health care appointments during times that do not conflict with classroom and clinical activities.

The number and timing of absences can impact the quality of the education, and there are many issues to consider, including the potential for accumulation and use of absences over one or more experiences; the active participation required by some curricular and clinical experiences over a limited number of days; the impact on individual vs. team learning; and student responsibility for the content or experiences missed. Medical schools should recognize that some students will be absent during any curricular component and should develop alternative, timely means for students to achieve curricular goals affected by an absence and avoid educational delays.

School policy varied regarding the number and timing of excused absences allowed, usually limiting the number of absences per course, block, or year, and with restrictions on use, such as during testing, orientation, or critical learning experiences.[8,9,10,11] Some schools allowed these excused absences to be applicable equally across all phases of training (foundational and clinical), while for others absence from clinical duties was more restricted because it would decrease the total amount of time in clinical service and thus impact a valid assessment of clerkship performance .[12,13]

In addition to excused absences, several of the schools in the sampling had personal day policies. One school had core clerkship personal days, with a personal day defined as a day during a required clerkship in the third year when a medical student would be excused from the rotation and not required to state the reason. This policy allowed two personal days in the third year, and no more than one personal day could be taken on any individual clerkship. Personal days were restricted in some instances, such as exams, orientation, and assignments in which a student has responsibilities that would impact the clerkship, i.e., overnight or weekend call.[14] Another school allowed students up to three personal day passes during the pre-clerkship phase to attend to personal business. Personal day passes were restricted in some instances, such as exams and interprofessional activities, and a specific reason for using a personal day pass was not required.[15]

RELEVANT AMA POLICY

The AMA has policy in support of identification and management of stress and burnout in students and prioritizing self-care. The most specific policies related to the topic of this report are as follows:

- D-345.983, "Study of Medical Student, Resident, and Physician Suicide," which supports the education of faculty members, residents, and medical students in the recognition of the signs and symptoms of burnout and depression and access to free, confidential, and immediately available stigma-free mental health and substance use disorder services.

- D-405.978, "Access to Confidential Health Care Services for Physicians and Trainees," which includes advocating that medical students maintain self-care and are supported by their institutions in their self-care efforts.

- H-295.858, "Access to Confidential Health Services for Medical Students and Physicians," which in part asks that accreditation bodies encourage medical schools to make available confidential health care in reasonable proximity to the education/training site and consider
designating some segment of already-allocated personal time off specifically for routine health screening and preventive services.

- H-405.960, "Policies for Parental, Family and Medical Necessity Leave," which in part encourages medical schools to develop written policies on parental leave, family leave, and medical leave for medical students, including how time can be made up in order for medical students to be eligible for graduation with minimal or no delays, and whether schedule accommodations are allowed.

These policies are listed in full detail in Appendix A.

SUMMARY AND RECOMMENDATIONS

Resolution 314-A-22 requests that the AMA 1) encourage medical schools to accept flexible uses for excused absences from clinical clerkships and 2) support a clearly defined number of easily accessible personal days for medical students per academic year, some of which should be granted without requiring an explanation on the part of the students.

Time constraints and the fear of stigma and negative professional consequences are key barriers to medical student access to care. Existing AMA policy supports the identification and management of medical student burnout and the prioritization of self-care by medical students and their institutions, including the allocation of time and access to services. However, the impact of excused absences on medical student education must be considered carefully, including their use, quantity, and timing, as medical schools create and implement policy with their own curriculum structures in mind.

The Council on Medical Education therefore recommends that the following recommendation be adopted in lieu of Resolution 314-A-22 and the remainder of this report be filed:

1. That our AMA support a requirement that each medical school have policy defining 1) the number of days a medical student may be excused from each curricular component; 2) the processes for using excused absences, providing alternative, timely means of achieving curricular goals when absent from a curricular component; and 3) effective mechanisms to communicate these policies at appropriate times throughout the curriculum; and that schools be encouraged to create a mechanism by which at least some portion of such days can be used without requiring explanation.

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APPENDIX: RELEVANT AMA POLICY

D-345.983, "Study of Medical Student, Resident, and Physician Suicide"

Our AMA will: (1) explore the viability and cost-effectiveness of regularly collecting National Death Index (NDI) data and confidentially maintaining manner of death information for physicians, residents, and medical students listed as deceased in the AMA Physician Masterfile for long-term studies; (2) monitor progress by the Association of American Medical Colleges, the American Association of Colleges of Osteopathic Medicine, 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; (3) support 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 mental health and substance use disorder services; (4) collaborate with other stakeholders to study the incidence of and risk factors for depression, substance misuse and substance use disorders, and attempted and completed suicide among physicians, residents, and medical students; and (5) work with appropriate stakeholders to explore the viability of developing a standardized reporting mechanism for the collection of current wellness initiatives that institutions have in place to inform and promote meaningful mental health and wellness interventions in these populations.

(CME Rep. 06, A-19; Modified: Res. 326, A-22)

D-405.978, "Access to Confidential Health Care Services for Physicians and Trainees"

1. Our AMA will advocate that: (a) physicians, medical students and all members of the health care team (i) maintain self-care, (ii) are supported by their institutions in their self-care efforts, and (iii) in order to maintain the confidentiality of care, have access to affordable health care, including mental and physical health care, outside of their place of work or education; and (b) employers support access to mental and physical health care including but not limited to providing access to out-of-network in person and/or via telemedicine, thereby reducing stigma, eliminating discrimination, and removing other barriers to treatment.
2. Our AMA will advocate for best practices to ensure physicians, medical students and all members of the health care teams have access to appropriate behavioral, mental, primary, and specialty health care and addiction services.

(Res. 7, I-20)

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; Reaffirmed: BOT Rep. 15, A-19; Reaffirmed: Res. 228, I-22)

H-405.960, “Policies for Parental, Family and Medical Necessity Leave”

AMA adopts as policy the following guidelines for, and encourages the implementation of, Parental, Family and Medical Necessity Leave for Medical Students and Physicians:
1. Our AMA urges residency training programs, medical specialty boards, the Accreditation Council for Graduate Medical Education, and medical group practices to incorporate and/or encourage development of leave policies, including parental, family, and medical leave policies, as part of the physician's standard benefit agreement.
2. Recommended components of parental leave policies for physicians include: (a) duration of leave allowed before and after delivery; (b) category of leave credited; (c) whether leave is paid or unpaid; (d) whether provision is made for continuation of insurance benefits during leave, and who pays the premium; (e) whether sick leave and vacation time may be accrued from year to year or used in advance; (f) how much time must be made up in order to be considered board eligible; (g) whether make-up time will be paid; (h) whether schedule accommodations are allowed; and (i) leave policy for adoption.
3. AMA policy is expanded to include physicians in practice, reading as follows: (a) residency program directors and group practice administrators should review federal law concerning maternity leave for guidance in developing policies to assure that pregnant physicians are allowed the same sick leave or disability benefits as those physicians who are ill or disabled; (b) staffing levels and scheduling are encouraged to be flexible enough to allow for coverage without creating intolerable increases in other physicians' workloads, particularly in residency programs; and (c) physicians should be able to return to their practices or training programs after taking parental leave without the loss of status.
4. Our AMA will study the impact on and feasibility of medical schools, residency programs, specialty boards, and medical group practices incorporating into their parental leave policies a 12-week minimum leave allowance, with the understanding that no parent be required to take a minimum leave.
5. Our AMA recommends that medical practices, departments and training programs strive to provide 12 weeks of paid parental, family and medical necessity leave in a 12-month period for their attending and trainee physicians as needed.
6. Residency program directors should review federal and state law for guidance in developing policies for parental, family, and medical leave.
7. Medical students and physicians who are unable to work because of pregnancy, childbirth, abortion or stillbirth, and other related medical conditions should be entitled to such leave and other benefits on the same basis as other physicians who are temporarily unable to work for other medical reasons.
8. Residency programs should develop written policies on leave for physicians. Such written policies should include the following elements: (a) leave policy for birth or adoption; (b) duration of leave allowed before and after delivery; (c) duration of leave allowed after abortion or stillbirth; (d) category of leave credited (e.g., sick, vacation, parental, unpaid leave, short term disability); (e) whether leave is paid or unpaid; (f) whether provision is made for

continuation of insurance benefits during leave and who pays for premiums; (g) whether sick leave and vacation time may be accrued from year to year or used in advance; (h) extended leave for resident physicians with extraordinary and long-term personal or family medical tragedies for periods of up to one year, without loss of previously accepted residency positions, for devastating conditions such as terminal illness, permanent disability, or complications of pregnancy that threaten maternal or fetal life; (i) how time can be made up in order for a resident physician to be considered board eligible; (j) what period of leave would result in a resident physician being required to complete an extra or delayed year of training; (k) whether time spent in making up a leave will be paid; and (l) whether schedule accommodations are allowed, such as reduced hours, no night call, modified rotation schedules, and permanent part-time scheduling.

9. Medical schools should develop written policies on parental leave, family leave, and medical leave for medical students. Such written policies should include the following elements: (a) leave policy for birth or adoption; (b) duration of leave allowed before and after delivery; (c) extended leave for medical students with extraordinary and long-term personal or family medical tragedies, without loss of previously accepted medical school seats, for devastating conditions such as terminal illness, permanent disability, or complications of pregnancy that threaten maternal or fetal life; (d) how time can be made up in order for a medical students to be eligible for graduation with minimal or no delays; (e) what period of leave would result in a medical student being required to complete an extra or delayed year of training; and (f) whether schedule accommodations are allowed, such as modified rotation schedules, no night duties, and flexibility with academic testing schedules.

10. Our AMA endorses the concept of equal parental leave for birth and adoption as a benefit for resident physicians, medical students, and physicians in practice regardless of gender or gender identity.

11. Staffing levels and scheduling are encouraged to be flexible enough to allow for coverage without creating intolerable increases in the workloads of other physicians, particularly those in residency programs.

12. Physicians should be able to return to their practices or training programs after taking parental leave, family leave, or medical leave without the loss of status.

13. Residency program directors must assist residents in identifying their specific requirements (for example, the number of months to be made up) because of leave for eligibility for board certification and must notify residents on leave if they are in danger of falling below minimal requirements for board eligibility. Program directors must give these residents a complete list of requirements to be completed in order to retain board eligibility.

14. Our AMA encourages flexibility in residency programs and medical schools incorporating parental leave and alternative schedules for pregnant trainees.

15. In order to accommodate leave protected by the federal Family and Medical Leave Act, our AMA encourages all specialties within the American Board of Medical Specialties to allow graduating residents to extend training up to 12 weeks after the traditional residency completion date while still maintaining board eligibility in that year.

16. Our AMA will work with appropriate stakeholders to encourage that residency programs annually publish and share with FREIDA and other appropriate stakeholders, (a) self-identified and other demographic data, including but not limited to the composition of their program over the last 5 years by age; historically marginalized, minoritized, or excluded status; sexual orientation and gender identity.

17. Our AMA will encourage the Accreditation Council for Graduate Medical Education and other relevant stakeholders to annually collect data on childbirth and parenthood from all accredited US residency programs and publish this data with disaggregation by gender identity and specialty.

18. These policies as above should be freely available online through FREIDA and in writing to all current trainees and applicants to medical school, residency or fellowship.

(CCB/CLRPD Rep. 4, A-13; Modified: Res. 305, A-14; Modified: Res. 904, I-14; Modified: Res. 307, A-22; Modified: Res. 302, I-22; Modified: Res. 312, I-22)

6. MODIFYING FINANCIAL ASSISTANCE ELIGIBILITY CRITERIA FOR MEDICAL SCHOOL APPLICANTS

Reference committee hearing: see report of Reference Committee C.

HOUSE ACTION: RECOMMENDATIONS ADOPTED
REMAINDER OF REPORT FILED
See Policy D-305.950

At its 2022 Annual Meeting, the American Medical Association (AMA) House of Delegates (HOD) adopted Policy D-305.950, "Modifying Financial Assistance Eligibility Criteria for Medical School Applicants," which directs the AMA to:

> work with the Association of American Medical Colleges, American Association of Colleges of Osteopathic Medicine, and other appropriate stakeholders to study process reforms that could help mitigate the high cost of applying to medical school for low-income applicants, including better targeting application fee waivers through broadened eligibility criteria.

Testimony during the meeting expressed concern that applicants to medical school are often required to disclose their parental financial information, regardless of whether the applicant would individually meet a lower income threshold or are eligible for extensive financial aid through federal programs. This report will review the application process as well as the fee assistance programs and discuss reforms and resources to further aid individuals struggling to afford the high costs of application to medical school.

BACKGROUND

Journey into medical school and associated costs

The preparation to apply to medical school begins well before filling out an application form, starting with completion of high school education or General Education Development test (GED), as required for entry into an undergraduate degree program. According to the National Center for Education Statistics (NCES), 86 percent of students earned a diploma at the end of the 2018-2019 school year — an all-time high. Asian/Pacific Islander students had the highest adjusted cohort graduation rate (93 percent), followed by White (89 percent), Hispanic (82 percent), Black (80 percent), and American Indian/Alaska Native (74 percent) students.[1]

The following table provides detail regarding the related steps for entry into medical school and their related costs (as of 2023):

Requirement	MD	DO	Associated costs
Undergraduate program (average 4 years)	Tuition, books, and related fees. Completion of bachelor's degree, inclusive of prerequisite courses. Some students may qualify for scholarships or waivers.		Expenses related to travel, housing, food, health care, electronic device, internet access.
Medical College Admissions Test® (MCAT®)	$330 standard fee[2] $120 nonrefundable international fee (for examinees testing outside the U.S., Canada, or U.S. Territories; in addition to the standard fee).[2] Students who qualify for the Association of American Medical Colleges' Fee Assistance Program (FAP) pay a reduced fee of $135.[2]		Expenses related to test preparation tools/courses; travel to test site, lodging, food.

Primary medical school application fee	American Medical College Application Service® (AMCAS®): $170 for first school.[3] $43 for each additional school.* Some schools do not use AMCAS.	American Association of Colleges of Osteopathic Medicine Application Service (AACOMAS) $198 for first school.[4] $50 for each additional school.	Expenses related to application preparation tools, electronic device, internet access, college service fees (e.g., transmit transcript and/or letters of recommendation.
Secondary application fee	Average $50-100 per school*		Electronic device, internet access.
Access to database about medical schools	Optional subscription to Medical School Admission Requirements® (MSAR®) database to view information about allopathic medical schools. $28 for one year, $36 for two years, free to FAP students.[5]	Optional free access to Choose DO Explorer to view information about osteopathic medical schools.	Electronic device, internet access.
Medical school interviews (virtual or in person)	Costs may vary depending on mode of travel, lodging, attire, meals per interview location.		Electronic device, internet access.

*2022 data indicates an average of 18 primary applications per applicant (990,790 applications were submitted by 55,188 applicants).[6]

Acceptance into medical school is an expensive and time-consuming endeavor. Many applicants are financially assisted by others (parents, guardians) to pursue this process; however, some students are not financially dependent on their parents — for a variety of reasons. Yet the applications often require the applicant to disclose parental financial information. Further, this requirement does not seem to consider whether the applicant would individually without parental income meet a lower income threshold or be eligible for financial aid.

Financial assistance for medical school applications fees

AMCAS® application to allopathic medical school

The Association of American Medical Colleges (AAMC) offers the American Medical College Application Service® (AMCAS®), a centralized medical school application processing service used by most U.S. medical schools as the primary application method for their first-year entering classes. The subsection of the application called "Childhood Information" asks questions about the applicant's "parents and guardians" as well as how the applicant paid for an undergraduate education. It asks about percent scholarship, percent parental contribution, and percent of contribution from self. The applicant is able to respond "don't know" or "decline to answer" to the question about family income. According to the 2023 AMCAS® Applicant Guide, it uses such terms as "immediate family," "medically underserved," "state or federal assistance programs," and "Pell Grants." See Appendix A for examples of relevant questions in the AMCAS application.

The AAMC's Fee Assistance Program (FAP) assists those who, without financial assistance, would otherwise be unable to take the Medical College Admission Test® (MCAT®), apply to medical schools that use the American Medical College Application Service® (AMCAS®), etc. This program requires the applicant, if under age 26, to provide their parents' financial information and supporting tax documentation regardless of the applicant's marital status, tax filing status (independent or dependent), parents' country of residence, or whether their parents are willing to provide documentation. Exemptions from providing parental information include if the applicant:

- is legally emancipated,
- does not know if a parent is living,

- does not have a relationship with a parent and does not communicate with them,
- was in foster care or in the care of a legal guardian at the time they reached the age of majority,
- another circumstance that prohibits the obtaining of parent's financial information.[7]

In addition, exemption will be made if the parent is deceased, incarcerated, institutionalized, or permanently incapacitated or hospitalized.

AACOMAS application to osteopathic medical school

Similar to AMCAS, the American Association of Colleges of Osteopathic Medicine (AACOM) offers their own Application Service (AACOMAS). This application has a section entitled "Family Information" which requires the applicant to provide parents' names, note if parents are living or deceased, and provide any relatives who are DOs or MDs. It also asks optional questions about parents' occupation, residency, education, and household. A section called "Other information" collects "background information" that includes questions related to family income. Explanations are provided in the Applicant Help Center. See Appendix B for examples of relevant questions in the AACOMAS application.

AACOM offers the Fee Waiver Program. Students must apply to this program and receive approval, if applicable, before submitting their AACOMAS application. Applicant Help Center provides additional information on eligibility. Applicants who are not listed as a "dependent" on a previously filed Federal Income Tax Return Form 1040 are classified as "independent applicants." AACOM requires the applicant to submit both their own and their parent or guardian's 1040 forms.

Federal financial assistance requirements

Definition of "low-income"

The U.S. Department of Health and Human Services (HHS) defines "low-income levels" used for various health professions as authorized in Titles III, VII, and VIII of the Public Health Service Act. This information is periodically published in the Federal Register. Effective January 12, 2022, a "low-income family/household" is defined as having an annual income that does not exceed 200 percent of HHS's poverty guidelines.[8] "A family is a group of two or more individuals related by birth, marriage, or adoption who live together. Most HRSA programs use the income of a student's parent(s) to compute low-income status. However, a 'household' may potentially be only one person."[8] Low-income levels are adjusted annually based on poverty thresholds published by the U.S. Census Bureau.

Free Application for Federal Student Aid

The Free Application for Federal Student Aid (FASFA®), offered by the U.S. Department of Education, is a mechanism for students to apply for federal grants, work-study, and loans before each year of college. Such institutions use FAFSA data to determine an applicant's federal aid eligibility. The FASFA form makes clear that the student is the one applying for financial aid. Dependent students and their parents/guardians must both create FASFA IDs online and provide parental information in the application. If a parent does not have a Social Security number (SSN), they will not be able to create an FASFA ID (which requires an SSN). Unfortunately, this presents challenges for many parents who are not U.S. citizens. The FASFA program currently defines an "independent student" as one of the following:

- born before Jan. 1, 1999
- married
- a graduate or professional student
- a veteran
- a member of the armed forces
- an orphan
- a ward of the court
- someone with legal dependents other than a spouse
- an emancipated minor
- someone who is homeless or at risk of becoming homeless.[9]

DISCUSSION

Recent changes

Changes to application forms as well as the programs that create and maintain the forms are likely to impact the students who apply, or wish to apply, to medical school. Recent examples of changes are explained below.

FAP reforms

In 2022, the AAMC introduced the following changes to the FAP:

- Free and discounted items related to the MCAT and MSAR as noted in the table above.
- Open to everyone with a permanent U.S. address. Reference to U.S. citizenship and certain visa status eligibility requirements have been removed.
- Parental financial information is NOT required for applicants over age 26 on the day the application is submitted. Eligibility depends on income and poverty guidelines.
- Benefits are not retroactive. If awarded fee assistance, the applicant cannot apply benefits to previous registrations or purchases.
- Fee for secondary applications may be waived at some medical schools.[10]

Of note, many medical students apply and enter when they are younger than 26 (likely ages 22-24). Therefore, this benefit may not help most applicants.

Blockage of the Biden Administration debt relief program

Due to the economic challenges created by the COVID-19 pandemic, the Biden-Harris Administration issued a debt relief program to

- extend the pause on student loan repayments a few times, whereby no one with a federally held loan has had make a loan payments since President Biden took office,
- "provide up to $20,000 in debt relief to Pell Grant recipients with loans held by the Department of Education (DOE) and up to $10,000 in debt relief to non-Pell Grant recipients. Borrowers are eligible for this relief if their individual income is less than $125,000 or $250,000 for households. In addition, borrowers who are employed by non-profits, the military, or federal, state, Tribal, or local government may be eligible to have all of their student loans forgiven through the Public Service Loan Forgiveness (PSLF) program,"
- propose a rule change to create a new income-driven repayment plan to reduce future monthly payments for lower- and middle-income applicants.[11]

However, courts have issued orders blocking this student debt relief program and, as a result, applications are not being accepted at this time. This halt to the application process is likely having a real impact on medical school applicants. The Administration is seeking to overturn those orders. Thus, the student loan payment pause is extended until the DOE is permitted to implement the program or the litigation is resolved; if not resolved by June 30, 2023, then payments will resume 60 days after that.[11]

RELEVANT AMA POLICIES

The AMA has several related policies in place addressing medical school cost, debt, and diversity; however, none specifically address the cost and aspects of the application form itself. Related policies are listed here, and full text is available in Appendix C.

- H-295.888, Progress in Medical Education: the Medical School Admission Process
- D-200.985, Strategies for Enhancing Diversity in the Physician Workforce
- H-305.925, Principles of and Actions to Address Medical Education Costs and Student Debt
- H-305.988, Cost and Financing of Medical Education and Availability of First Year Residency Positions
- H-350.979, Increase the Representation of Minority and Economically Disadvantaged Populations in the Medical Profession

- D-295.303, Support Hybrid Interview Techniques for Entry to Graduate Medical Education
- H-255.968, Advance Tuition Payment Requirements for International Students Enrolled in US Medical Schools

SUMMARY AND RECOMMENDATIONS

The entire process surrounding acceptance into medical school is costly and time-consuming. The application itself is a significant expense and may require the student to disclose information about their parents and related income, even if the student is not being financially supported by them. Some families may financially support students but struggle to do so. Given limited resources, financial programs should prioritize low-income families and/or independent students. Further study is needed in order to propose equitable process reforms that could help mitigate the high cost of applying to medical school, particularly for low-income students.

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

1. That AMA policy D-305.950, Modifying Financial Assistance Eligibility Criteria for Medical School Applicants, be amended by addition and deletion to read as follows:

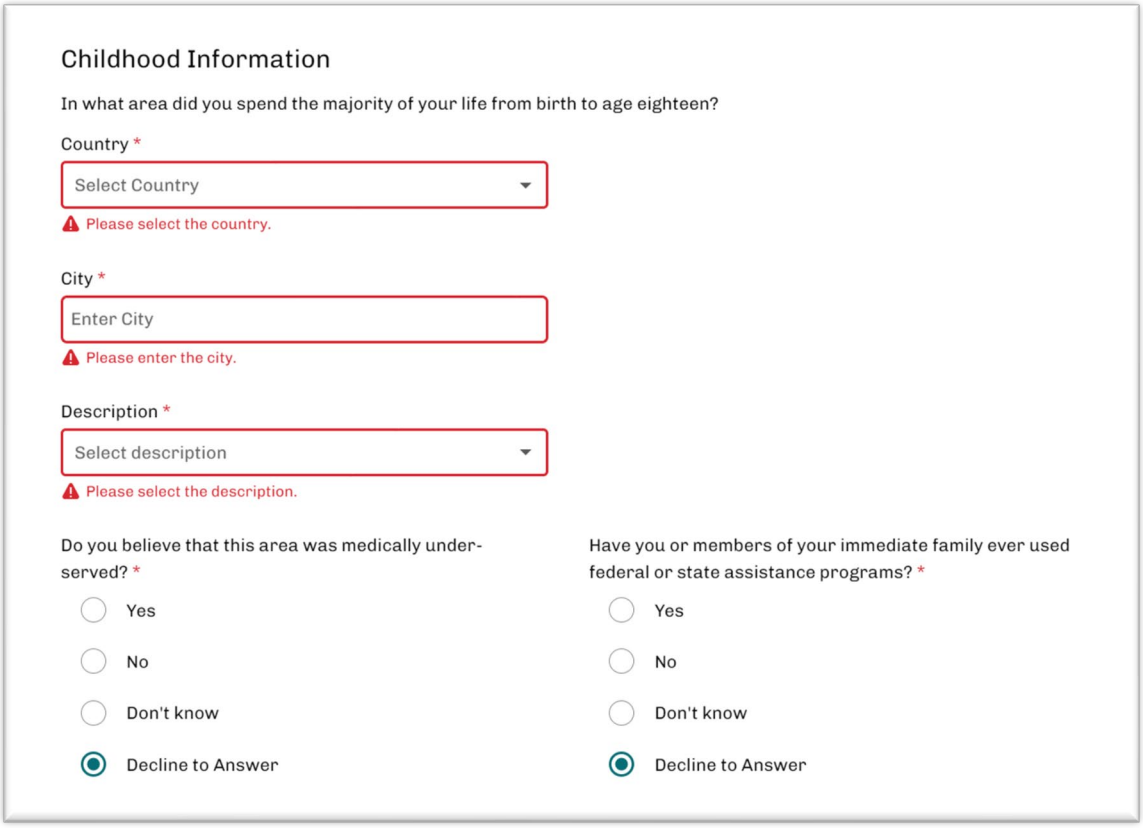
   1. Our AMA will ~~work with~~ encourage the Association of American Medical Colleges~~,~~ and American Association of Colleges of Osteopathic Medicine~~, and other appropriate stakeholders~~ to study process reforms ~~that could help~~ to mitigate the high cost of applying to medical school ~~for low-income applicants, including better targeting application fee waivers through broadened eligibility criteria,~~ and ensure cost parity among applicants to DO and MD granting institutions.

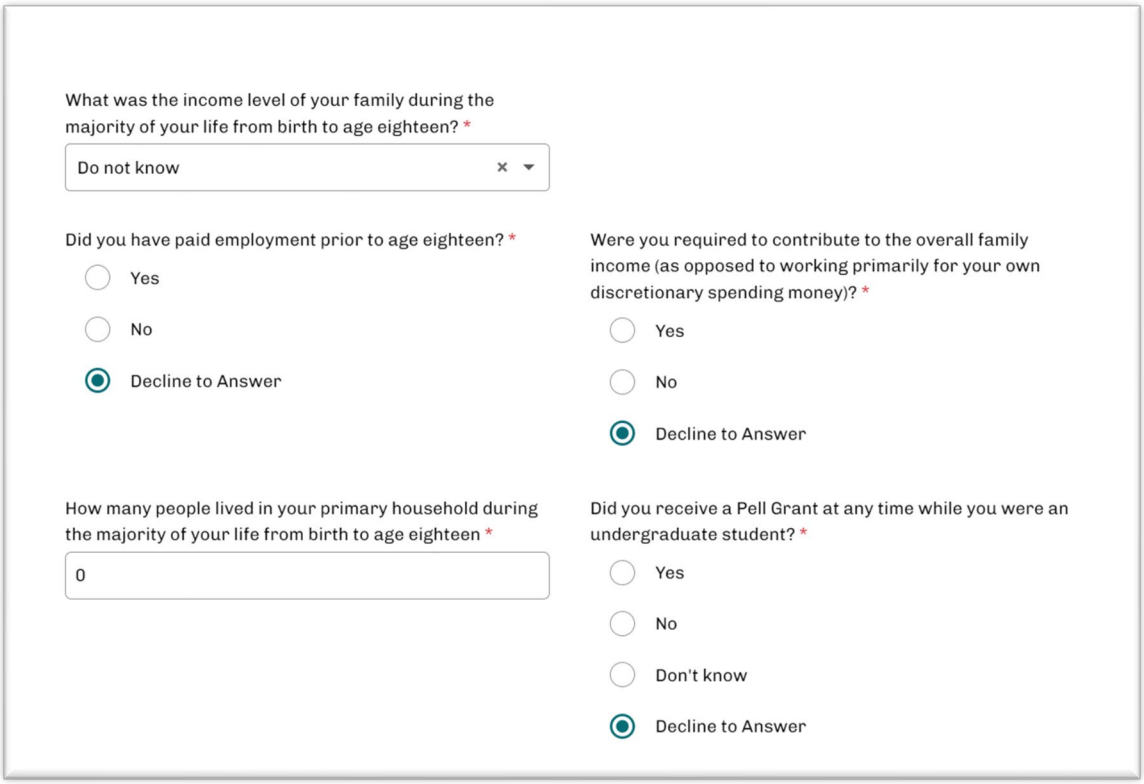
   2. Our AMA will encourage the Association of American Medical Colleges, American Association of Colleges of Osteopathic Medicine, and U.S. Department of Education to reevaluate application forms to financial aid programs such as the Fee Assistance Program (FAP), Fee Waiver Program (FWP), and Free Application for Federal Aid (FASFA) to broaden eligibility criteria for low-income students.

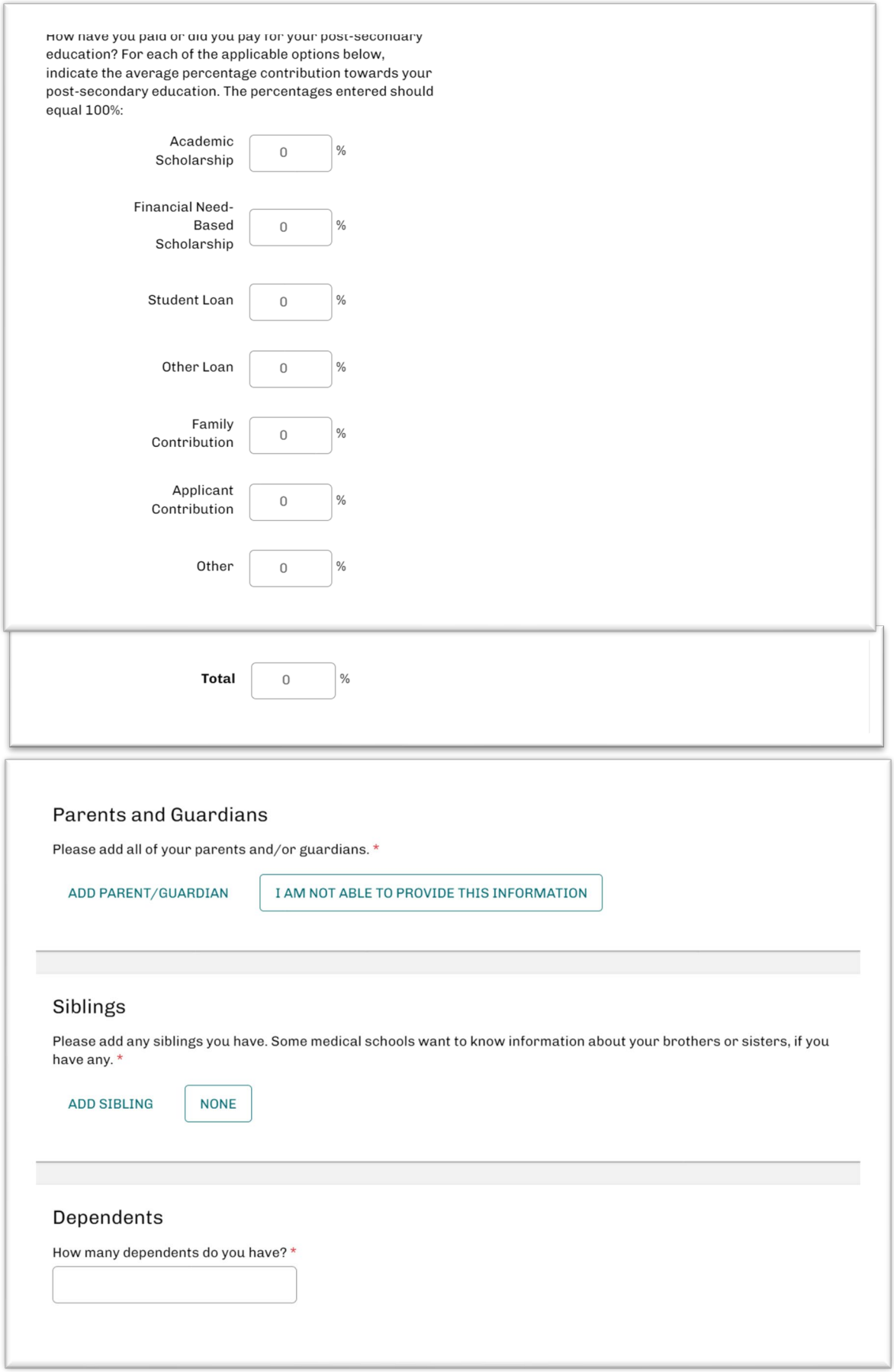
   3. Our AMA will commend the U.S. Department of Education for removing references to parental/guardian income for all medical students in the Free Application for Federal Aid (FASFA).

   4. Our AMA will encourage the Association of American Medical Colleges and American Association of Colleges of Osteopathic Medicine as well as medical school and state-based financial aid programs to remove references to parental/guardian income for all medical students and follow the U.S. Department of Education's definition of "independent student" as described in the Free Application for Federal Aid (FASFA).

APPENDIX A
Relevant AMCAS application questions







How have you paid or did you pay for your post-secondary education? For each of the applicable options below, indicate the average percentage contribution towards your post-secondary education. The percentages entered should equal 100%:

Academic Scholarship	0	%
Financial Need-Based Scholarship	0	%
Student Loan	0	%
Other Loan	0	%
Family Contribution	0	%
Applicant Contribution	0	%
Other	0	%
Total	0	%

Parents and Guardians

Please add all of your parents and/or guardians. *

ADD PARENT/GUARDIAN | I AM NOT ABLE TO PROVIDE THIS INFORMATION

Siblings

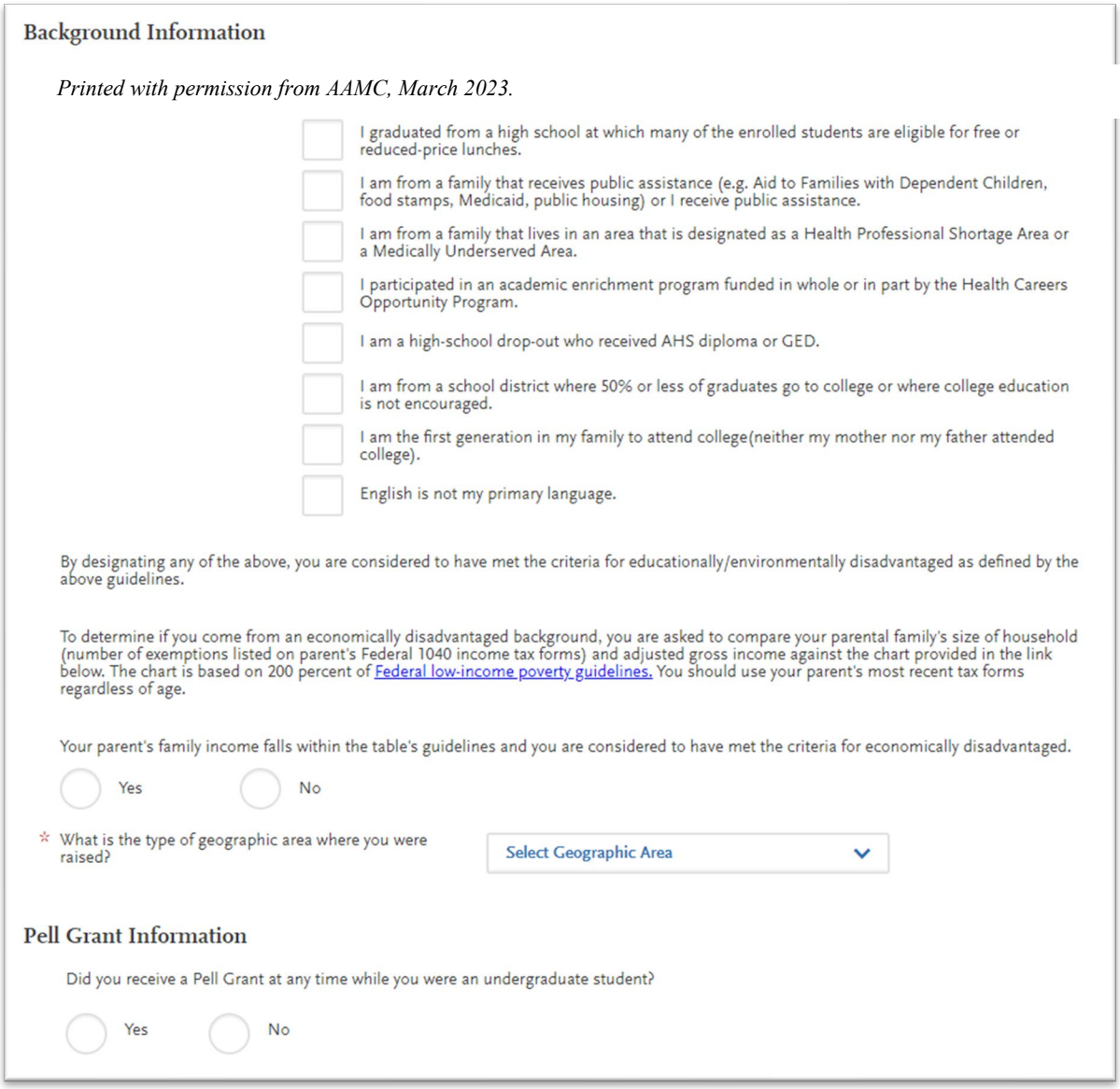
Please add any siblings you have. Some medical schools want to know information about your brothers or sisters, if you have any. *

ADD SIBLING | NONE

Dependents

How many dependents do you have? *

APPENDIX B
Relevant AACOMAS application questions



Background Information

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- [ ] I graduated from a high school at which many of the enrolled students are eligible for free or reduced-price lunches.
- [ ] I am from a family that receives public assistance (e.g. Aid to Families with Dependent Children, food stamps, Medicaid, public housing) or I receive public assistance.
- [ ] I am from a family that lives in an area that is designated as a Health Professional Shortage Area or a Medically Underserved Area.
- [ ] I participated in an academic enrichment program funded in whole or in part by the Health Careers Opportunity Program.
- [ ] I am a high-school drop-out who received AHS diploma or GED.
- [ ] I am from a school district where 50% or less of graduates go to college or where college education is not encouraged.
- [ ] I am the first generation in my family to attend college(neither my mother nor my father attended college).
- [ ] English is not my primary language.

By designating any of the above, you are considered to have met the criteria for educationally/environmentally disadvantaged as defined by the above guidelines.

To determine if you come from an economically disadvantaged background, you are asked to compare your parental family's size of household (number of exemptions listed on parent's Federal 1040 income tax forms) and adjusted gross income against the chart provided in the link below. The chart is based on 200 percent of Federal low-income poverty guidelines. You should use your parent's most recent tax forms regardless of age.

Your parent's family income falls within the table's guidelines and you are considered to have met the criteria for economically disadvantaged.

( ) Yes ( ) No

* What is the type of geographic area where you were raised? Select Geographic Area

Pell Grant Information

Did you receive a Pell Grant at any time while you were an undergraduate student?

( ) Yes ( ) No

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APPENDIX C
Relevant policies

H-295.888, Progress in Medical Education: the Medical School Admission Process
1. Our AMA encourages: (A) research on ways to reliably evaluate the personal qualities (such as empathy, integrity, commitment to service) of applicants to medical school and support broad dissemination of the results. Medical schools should be encouraged to give significant weight to these qualities in the admissions process; (B) premedical coursework in the humanities, behavioral sciences, and social sciences, as a way to ensure a broadly-educated applicant pool; and (C) dissemination of models that allow medical schools to meet their goals related to diversity in the context of existing legal requirements, for example through outreach to elementary schools, high schools, and colleges.
2. Our AMA: (A) will continue to work with the Association of American Medical Colleges (AAMC) and other relevant organizations to encourage improved assessment of personal qualities in the recruitment process for medical school applicants including types of information to be solicited in applications to medical school; (B) will

work with the AAMC and other relevant organizations to explore the range of measures used to assess personal qualities among applicants, including those used by related fields; (C) encourages the development of innovative methodologies to assess personal qualities among medical school applicants; (D) will work with medical schools and other relevant stakeholder groups to review the ways in which medical schools communicate the importance of personal qualities among applicants, including how and when specified personal qualities will be assessed in the admissions process; (E) encourages continued research on the personal qualities most pertinent to success as a medical student and as a physician to assist admissions committees to adequately assess applicants; and (F) encourages continued research on the factors that impact negatively on humanistic and empathetic traits of medical students during medical school.

D-200.985, Strategies for Enhancing Diversity in the Physician Workforce
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 and residency/fellowship programs use holistic assessments of applicants that take into account the diversity of preparation and the variety of talents that applicants bring to their education with the goal of improving health care for all communities.
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.
13. Our AMA will work with the AAMC and other stakeholders to create a question for the AAMC electronic medical school application to identify previous pipeline program (also known as pathway program) participation and create a plan to analyze the data in order to determine the effectiveness of pipeline programs.

H-305.925, Principles of and Actions to Address Medical Education Costs and Student Debt
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 participation in 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 employer's PSLF program qualifying status; (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; (j) Monitor the denial rates for physician applicants to the PSLF; (k) Undertake expanded federal advocacy, in the event denial rates for physician applicants are unexpectedly high, to encourage release of information on the basis for the high denial rates, increased transparency and streamlining of program requirements, consistent and accurate communication between loan servicers and borrowers, and clear expectations regarding oversight and accountability of the loan servicers responsible for the program; (l) Work with the United States Department of Education to ensure that applicants to the PSLF and its supplemental extensions, such as Temporary Expanded Public Service Loan Forgiveness (TEPSLF), are provided with the necessary information to successfully complete the program(s) in a timely manner; and (m) Work with the United States Department of Education to ensure that individuals who would otherwise qualify for PSLF and its supplemental extensions, such as TEPSLF, are not disqualified from the program(s).
21. Advocate for continued funding of programs including Income-Driven Repayment plans for the benefit of reducing medical student load burden.
22. Strongly advocate for the passage of legislation to allow medical students, residents and fellows who have education loans to qualify for interest-free deferment on their student loans while serving in a medical internship, residency, or fellowship program, as well as permitting the conversion of currently unsubsidized Stafford and Graduate Plus loans to interest free status for the duration of undergraduate and graduate medical education.

H-305.988, Cost and Financing of Medical Education and Availability of First Year Residency Positions
Our AMA:
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.

H-350.979, Increase the Representation of Minority and Economically Disadvantaged Populations in the Medical Profession
Our AMA supports increasing the representation of minorities in the physician population by: (1) Supporting efforts to increase the applicant pool of qualified minority students by: (a) Encouraging state and local governments to make quality elementary and secondary education opportunities available to all; (b) Urging medical schools to strengthen or initiate programs that offer special premedical and precollegiate experiences to underrepresented minority students; (c) urging medical schools and other health training institutions to develop new and innovative measures to recruit underrepresented minority students, and (d) Supporting legislation that provides targeted financial aid to financially disadvantaged students at both the collegiate and medical school levels.
(2) Encouraging all medical schools to reaffirm the goal of increasing representation of underrepresented minorities in their student bodies and faculties.
(3) Urging medical school admission committees to consider minority representation as one factor in reaching their decisions.
(4) Increasing the supply of minority health professionals.
(5) Continuing its efforts to increase the proportion of minorities in medical schools and medical school faculty.
(6) Facilitating communication between medical school admission committees and premedical counselors concerning the relative importance of requirements, including grade point average and Medical College Aptitude Test scores.
(7) Continuing to urge for state legislation that will provide funds for medical education both directly to medical schools and indirectly through financial support to students.
(8) Continuing to provide strong support for federal legislation that provides financial assistance for able students whose financial need is such that otherwise they would be unable to attend medical school.

D-295.303, Support Hybrid Interview Techniques for Entry to Graduate Medical Education
Our AMA will:
1. work with relevant stakeholders to study the advantages and disadvantages of an online medical school interview option for future medical school applicants, including but not limited to financial implications and potential solutions, long term success, and well-being of students and residents.
2. encourage appropriate stakeholders, such as the Association of American Medical Colleges, American Association of Colleges of Osteopathic Medicine, Intealth, and Accreditation Council for Graduate Medical Education, to study the feasibility and utility of videoconferencing for graduate medical education (GME) interviews and examine interviewee and program perspectives on incorporating videoconferencing as an adjunct to GME interviews, in order to guide the development of equitable protocols for expansion of hybrid GME interviews.

H-255.968, Advance Tuition Payment Requirements for International Students Enrolled in US Medical Schools
Our AMA:
1. supports the autonomy of medical schools to determine optimal tuition requirements for international students;
2. encourages medical schools and undergraduate institutions to fully inform international students interested in medical education in the US of the limited options available to them for tuition assistance;
3. supports the Association of American Medical Colleges (AAMC) in its efforts to increase transparency in the medical school application process for international students by including school policy on tuition requirements in the Medical School Admission Requirements (MSAR); and
4. encourages medical schools to explore alternative means of prepayment, such as a letter of credit, for four years of medical school.

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7. MANAGEMENT AND LEADERSHIP TRAINING IN MEDICAL EDUCATION

Reference committee hearing: see report of Reference Committee C.

HOUSE ACTION: RECOMMENDATIONS ADOPTED AS FOLLOWS IN LIEU OF RESOLUTION 318 REMAINDER OF REPORT FILED
See Policy D-295.316

At the 2022 Annual Meeting, the American Medical Association (AMA) House of Delegates (HOD) adopted new policy directing the AMA to:

> (a) study the extent of the impact of AMA Policy D-295.316, "Management and Leadership for Physicians," on elective curriculum; and (b) expand efforts to promote the tenets of health systems science to prepare trainees for leadership roles and address prevalent challenges in the practice of medicine and public health.

Testimony on this item supported the need for physician leaders and the development of necessary leadership and communication skills. This is in alignment with the AMA's work to inculcate health systems science throughout the medical education curriculum as part of its Accelerating Change in Medical Education initiative (now renamed ChangeMedEd).

This report is written in response to these newly adopted directives. While there is no clear way to study the extent of the impact of AMA policy on elective curricula, this report provides background on Policy D-295.316, describes efforts made to advance learning opportunities regarding physician management and leadership, and discusses how this topic relates to the foundational platform of health systems science.

BACKGROUND

AMA Policy D-296.316, "Management and Leadership for Physicians"

Policy D-295.316 was originally adopted at the 2014 Interim Meeting (I-14). It was amended at I-16 and A-18 and most recently at A-22 with the addition of a fourth clause, which is the impetus for this report. The policy was also reaffirmed at A-17. Currently, the full policy contains four clauses and reads as follows:

1. Our AMA will study advantages and disadvantages of various educational options on management and leadership for physicians with a report back to the House of Delegates; and develop an online report and guide aimed at physicians interested in management and leadership that would include the advantages and disadvantages of various educational options.
2. Our AMA will work with key stakeholders to advocate for collaborative programs among medical schools, residency programs, and related schools of business and management to better prepare physicians for administrative, financial and leadership responsibilities in medical management.
3. Our AMA: (a) will advocate for and support the creation of leadership programs and curricula that emphasize experiential and active learning models to include knowledge, skills and management techniques integral to achieving personal and professional financial literacy and leading interprofessional team care, in the spirit of the AMA's Accelerating Change in Medical Education initiative; and (b) will advocate with the Liaison Committee on Medical Education, Association of American Medical Colleges and other governing bodies responsible for the education of future physicians to implement programs early in medical training to promote the development of leadership and personal and professional financial literacy capabilities.
4. Our AMA will: (a) study the extent of the impact of AMA Policy D-295.316, "Management and Leadership for Physicians," on elective curriculum; and (b) expand efforts to promote the tenets of health systems science to prepare trainees for leadership roles and address prevalent challenges in the practice of medicine and public health.

From 2014-2016, AMA conducted a qualitative study and environmental scan to evaluate the market for physician leadership training and development and to test the potential demand for AMA-led programs. As a result of this research, the AMA launched the development of leadership-related content for physicians specific to topics where the AMA has unique expertise at both the individual and practice levels. Given the evolution of this policy from

2014 to 2022, several actions were taken over the years to accomplish the directives in clauses (1)-(3). These actions are enumerated in Appendix A and further addressed in the report's recommendations.

Educational Standards, Competencies, and Resources

Many organizations and institutions are responsible for the education of future physicians. They may implement programs in medical training to promote the development of leadership as well as personal and professional financial literacy capabilities. The Liaison Committee on Medical Education (LCME) and Association of American Medical Colleges (AAMC), while not "governing bodies" as stated in clause 3b of AMA policy D-295.316, do play a role. Likewise, the American Osteopathic Association (AOA), Commission on Osteopathic College Accreditation (COCA), American Association of Colleges of Osteopathic Medicine (AACOM), and Accreditation Council for Graduate Medical Education (ACGME) also play important roles.

The LCME determines the standards an allopathic medical school must meet to maintain accreditation. Such standards include Self-Directed and Life-Long Learning (6.3), Interprofessional Collaborative Skills (7.9), and Financial Aid/Debt Management Counseling/Student Educational Debt (12.1) — all of which address and support the topics raised in Policy D-295.316 clause (3a).[1] Similarly, COCA's standards include Curriculum Design and Management (6.1), Self-Directed Learning (6.7), Interprofessional Education for Collaborative Practice (6.8), Financial Aid and Debt Management Counseling (9.7), Student Debt Outcomes (11.3), and Title IV Responsibility (12.9).[2]

The AAMC offers 15 competencies for entering medical students that lend themselves toward the development of skills necessary for effective leadership.[3] The AAMC's Group on Student Affairs (GSA) supports professional development, inclusive of leadership skills, and offers a framework to provide performance benchmarks.[4] Further, the GSA provides various resources and a downloadable, interactive catalog to identify which resources best suit the individual. For example, the Leadership Education and Development (LEAD) Certificate Program is designed to foster leaders in academic medicine.

The AACOM's Leadership Institute supports leadership development through a variety of resources suitable for DOs at all career stages and pursuits, including a Senior Leadership Development Program as well as a fellowship and internship in osteopathic health policy.

The ACGME Common Program Requirements, effective July 2022, establish that the qualifications of a program director include leadership skills (II.A.3.a) and professionalism (II.A.4.a).[5] Likewise, a program coordinator should possess skills in management and leadership. The requirements acknowledge that programs may place different emphasis on some skills such as leadership. The "core competencies" of the ACGME and American Board of Medical Specialties (ABMS) provide the foundation for residency milestones as well as board certification standards (initial and continuing).[6] These competencies address aspects of leadership:

- Patient Care and Procedural Skills
- Medical Knowledge
- Practice-based Learning and Improvement
- Interpersonal and Communication Skills
- Professionalism
- Systems-based Practice

DISCUSSION

Management and leadership skills are complementary and may overlap but their ultimate functions differ. The concept of "leadership" seeks to move an organization toward achieving a strategic vision though change. "Management" is a newer concept focused on organizational efficiency and effectiveness while also addressing its complexity. In short, "leadership can be said to craft the vision and strategy, and management is necessary to operationalize."[7] Management training usually includes topics such as business/practice management, organizational skills, time, and stress management; whereas leadership training often addresses such topics as communication, interpersonal skills, cultural sensitivity, facilitation, problem solving, team building, and conflict resolution. It is important for good leaders to understand management principles to achieve their vision. Leadership will be further explored in Council on Medical Education Report 9-A-23 addressing accreditation standards for competency in leading interprofessional health care teams.

AMA Management and Leadership Opportunities

The AMA's focused work in Medical Education as well as Physician Satisfaction and Practice Sustainability offers a wide range of learning opportunities and resources that address the broad and diverse topic of physician leadership.

- The AMA Undergraduate Medical Education Curricular Enrichment Program (UCEP), a series of online educational modules designed to complement undergraduate medical school curricula including modules on leadership.
- The AMA Medical Student Leadership Learning Series offers interactive modules that provide realistic scenarios and resources to help medical students become skilled in core competencies of leadership.
- The Succeeding in Medical School series provides medical students and international medical graduates with medical school tips and other guidance on a wide range of critical topics, including preparing for the United States Medical Licensing Examination® (USMLE®), navigating clinical rotations, publishing scientific research, and maintaining optimal health and wellness. It also provides opportunities for physicians to develop leadership skills and advocate for patients and the profession.
- The AMA's Accelerating Change in Medical Education initiative, recently renamed ChangeMedEd, works across the education continuum with visionary partners to create bold innovations in undergraduate and graduate medical education. It offers transformative resources for learners and educators, as well as national events that disseminate innovations to better train physicians to meet the needs of patients today and in the future. Members of the Accelerating Change in Medical Education Consortium actively collaborate on the development of leadership curricula at the undergraduate medical education level. This includes resources to address shaping tomorrow's leaders. This initiative also created the Health Systems Science framework, described in more detail below.
- The AMA GME Competency Education Program (GCEP) offers a robust series of online educational courses that complement teachings in residency and fellowship programs with meaningful, nonclinical knowledge that is easy to digest, understand, and apply. Built for busy residents, fellows, and faculty, GCEP offers flexible, self-paced learning with convenient anytime, anywhere access. It covers pertinent topics in GME such as resident well-being, sleep deprivation, the basics of health equity, and more. This award-winning program can help residents and fellows meet core program requirements and prepare for practice.
- The Reimagining Residency initiative is developing leadership training for residents. Efforts include curricula in professional identity formation.
- The Resident Diversity Leadership Program, supported by the AMA and administered through the University of Cincinnati, is a yearlong program for a cohort of 40 residents from backgrounds that have been historically excluded from medicine that meets monthly and works through a leadership curriculum.
- The STEPS Forward® practice innovation strategies offer real-world solutions to the challenges that physicians face every day. It provides tools to address barriers and restore joy in the practice of medicine. Further, STEPS Forward® offers proven approaches on how to successfully lead and manage change initiatives, empower the team, and drive tangible results. It offers a toolkit of resources and information on leadership in practice and a pertinent webinar entitled "Leading Through a Crisis: Communication During COVID-19 Times." STEPS Forward also features a module, entitled "Cultivating Leadership: Measure and Assess Leader Behaviors to Improve Professional Well-Being," that guides learners in the importance of leadership in promoting well-being and emphasizes ways to improve leadership in practice. Further, the Joy in Medicine Health System Recognition program honors organizations that have demonstrated organizational investment in promoting leadership development.
- The AMA Ed Hub™ online learning platform provides high-quality education for physicians and other medical professionals to stay current and continuously improve the care they provide. It brings together education from trusted sources including the JAMA Network™ and the AMA Journal of Ethics® as well as curated content from external providers including access to the Stanford Leadership Virtual Journal Club. This platform offers many educational opportunities (e.g., articles, podcasts, learning activities) that address leadership, many of which offer CME credit.
- The AMA Foundation's Leadership Development Institute offers a unique opportunity for physicians to gain individualized insight into the skills needed to foster their careers and the future of medicine. Participants receive professional development opportunities as well as mentoring throughout the course of the program. Activities include a weekend retreat, monthly training webinars, a year-long formal mentorship program and culminating workshops held in conjunction with the AMA Annual Meeting.

- The AMA Political Action Committee (AMPAC) is a bipartisan committee whose mission is to support candidates who will help medicine in Congress. In addition, AMPAC offers two political education training programs to encourage and support more members of the medical community to either seek public office or get involved in others' political campaigns. AMPAC has proudly offered these programs for over 30 years and has trained thousands of physicians to be successful candidates and activists.
- The AMA's Councils recommend educational policies to the AMA House of Delegates and have written many reports that discuss leadership in varying capacities. For example, the Council on Medical Education offered a report on the "The Structure and Function of Interprofessional Health Care Teams" that addresses the role of the physician leader.
- Participation in the AMA HOD, whether as a delegate/alternate delegate, ambassador, and/or member of a section, council, or board, demonstrates proactive physician leadership.

This rich variety of resources is available to students, trainees, physicians, and the medical education community; members and institutions are encouraged to avail themselves of these leadership training programs.

Health Systems Science

Health systems science (HSS) is a foundational platform and framework for understanding how health care is delivered, how health care professionals work together to deliver that care, and how the health system can improve patient care.

At the formation of the Accelerating Change in Medical Education initiative, the AMA called for innovations in "Promoting exemplary methods to achieve patient safety, performance improvement and patient-centered team-based care; and improving medical students' understanding of the health care system and health care financing."[8] Member medical schools of the Accelerating Change in Medical Education Consortium collaborated to create and develop a replete framework for HSS. The framework rests upon systems thinking to unify domains such as leadership, teaming, change agency, health care structure and processes, policies and economics, value, improvement, and more.

The consortium has developed multiple resources to support faculty development and the integration of training in HSS into UME and then GME. Resources include a textbook (now in its second edition), online modules hosted on the AMA Ed Hub™, a faculty scholars program, and an implementation guidebook. A full inventory of resources is displayed on a public landing page. The AMA also hosted a Health Systems Science Summit in 2022 to promote dissemination in UME and GME with over 250 participants.

A 2018 inventory of MD-granting medical schools conducted by the AMA demonstrated that most schools have incorporated some elements of HSS, and over 50 percent use the AMA textbook as a faculty resource. AMA staff and external partners continue to promote dissemination across UME and GME.

Data on related curricula and training

LCME Part II Annual Medical School Questionnaire
This LCME questionnaire collects data on both leadership and health systems science within the medical school curriculum. The following data are from the 2021-2022 questionnaire with responses from all 155 LCME-accredited medical education programs.[9]

	# of schools where topics are included	
Topic	**Required course in the pre-clerkship phase (Years 1 &2)**	**Required clerkship/ clinical discipline**
Leadership	103	93
Health systems science	135	120

National GME Census

Starting in 2019, the program survey of the National GME Census, which provides information for FREIDA™, the AMA's Residency and Fellowship Database®, asked if programs provided "Curriculum to develop health systems leadership skills (e.g., QI project leadership, community/organizational advocacy)."

Type of program		*Number and percent of programs with leadership development curriculum**						
	2019-2020	**%**	**2020-2021**	**%**	**2021-2022**	**%**	**2022-2023**	**%**
Residency	1421	27.2	1550	29.0	1547	28.4	1542	28.0
Fellowship	1181	16.9	1206	16.9	1135	15.4	1260	17.0
Program setting								
University hospital	1530	20.6	1593	21.3	1555	20.5	1535	20.4
Community hospital/ university affiliated	796	23.9	861	24.7	799	22.0	841	22.7
Community hospital	262	21.3	282	21.8	312	23.4	294	22.2
Other setting	14	6.0	20	8.6	16	6.8	132	35.5

Analysis of the American Medical Association's GME Database.
*Programs responding affirmatively to the question "Does the program offer… curriculum to develop health systems leadership skills (e.g., QI project leadership, community/organizational advocacy" in the National GME Census.

There does not appear to be significant growth in the number of programs providing leadership training over the past four years. Residency programs appear more likely to report having the curriculum compared to fellowship programs. Community-based programs are slightly more likely to report having a curriculum compared to university-based programs.

Medical subspecialty proposal

The certifying boards of multiple specialties, including the American Board of Emergency Medicine (ABEM), American Board of Anesthesiology, American Board of Preventive Medicine, and American Board of Family Medicine, recently received approval from the ABMS Committee on Certification (COCERT) for a subspecialty certification in Health Care Administration, Leadership and Management (HALM). The ABEM application indicated the purpose of the proposed certification is "to recognize expertise held by physicians with sophisticated, comprehensive knowledge that covers the broad, system-based leadership needs of health care environments, including those related to patient care as well as other health system administrative and management needs. HALM integrates expertise from medicine, health systems science, quality improvement, patient safety, business, public health, communication, computer science, economics, law, and other disciplines in a singular subspecialty certification."[10] The ACGME has approved program requirements for GME training programs in HALM, which can have accredited lengths of either 12 or 24 months. While there are not yet any accredited programs, there are similar programs already in existence that are likely to seek accreditation.

RELEVANT AMA POLICIES

In addition to Policy D-295.316, the AMA has other policies related to physician leadership and management as listed here. These full policies are provided in Appendix B.

- H-235.981, Qualifications, Selection, and Role of Medical Directors, Chief Medical Officers, Vice Presidents for Medical Affairs, and Others Employed by or Under Contract with Hospitals/Health Systems to Provide Medical Management Services
- H-405.990, Physician Managers
- H-445.984, Training Physicians and Physicians-in-Training in the Art of Public Speaking

SUMMARY AND RECOMMENDATIONS

The AMA has made significant efforts in the last 10-plus years to address, support, and advocate for physician leadership. These efforts align with the educational standards regarding leadership set by the accrediting bodies and are complemented by the many partnerships that have been forged to advance physician leadership. It is very difficult to study the "extent of the impact" (as stated in the new fourth clause of D-295.316) of a policy on elective curriculum with any degree of accuracy or thoroughness given the wide scope of the resources offered, as described above. The research conducted for this report indicates that the efforts made by the AMA, its partners, and other external stakeholders continue to advance physician leadership by way of curricula, training programs, resources, and development of a possible subspecialty. The AMA has made great strides to embed leadership into the tenets of HSS to prepare trainees for leadership roles and address prevalent challenges in the practice of medicine and public health. The AMA is committed to continuing such efforts and promoting them accordingly.

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

1. That clause (1) of AMA policy D-295.316 be rescinded as such directives have been accomplished per the actions, programs, and resources summarized in this report.

2. ~~"Our AMA will study advantages and disadvantages of various educational options on management and leadership for physicians with a report back to the House of Delegates; and develop an online report and guide aimed at physicians interested in management and leadership that would include the advantages and disadvantages of various educational options."~~

3. That clauses (2) and (3) of AMA policy D-295.316 be amended by addition and deletion to read as follows:

   2. "Our AMA supports ~~will work with key stakeholders to advocate for~~ collaborative programs among medical schools, residency programs, and related schools of business and management to ~~better~~ give physicians the opportunity to assume ~~for~~ administrative, financial, and leadership responsibilities in medical management."

   3. "Our AMA: (a) ~~will advocate for and~~ supports and participates in the creation and promotion of management and leadership programs and curricula that emphasize experiential and active learning models to include knowledge, skills, and management techniques integral to achieving ~~personal and professional~~ financial literacy and leading interprofessional ~~team~~ health care teams~~, in the spirit of the AMA's Accelerating Change in Medical Education initiative~~; and (b) encourages ~~will advocate with the Liaison Committee for Medical Education, Association of American Medical Colleges and other to~~ the organizations ~~governing bodies~~ responsible for the education of future physicians to implement programs ~~early in~~ throughout medical training to ~~promote the~~ develop~~ment of~~ management and leadership competencies and ~~personal and professional~~ financial literacy capabilities."

4. That AMA policy D-295.316 be amended by addition of new clause (3c) to read as follows:

   Our AMA: (c) encourages key stakeholders to collect and analyze data on the effectiveness of management and leadership training and share such information with the medical education community.

5. That clause (4a) of AMA policy D-295.316 be rescinded, as having been accomplished by the writing of this report.

   Our AMA will: ~~(a) study the extent of the impact of AMA Policy D-295.316, "Management and Leadership for Physicians," on elective curriculum; and (b)~~ expand efforts to promote the tenets of health systems science to prepare trainees for leadership roles and address prevalent challenges in the practice of medicine and public health.

6. That AMA policy D-295.316 be amended by addition of a new clause (5), to read as follows:

   Our AMA will create a central online directory of its management and leadership resources that is searchable on the AMA website and promote the directory and these resources to AMA members and the medical education community.

APPENDIX A
History and evolution of AMA Policy D-295.316 prior to A-22

This policy is rooted in Resolution 918-I-14 whose genesis was inspired by the desire to build upon BOT 28-A-14, "Qualifications, Selection, and Role of Hospital Medical Directors and Others Providing Medical Management Services"; this BOT report recommended extensive amendments to Policy H-235.981.

Timeline for D-295.316:
- Substitute Resolution 918, I-14
- Appended: Res. 306, I-16
- Reaffirmed in lieu of: Res. 307, A-17
- Modified: Res. 313, A-18
- Appended: Res. 327, A-22

CLAUSE	HOD ACTION	ACCOMPLISHMENTS
1. "Our AMA will study advantages and disadvantages of various educational options on management and leadership for physicians with a report back to the House of Delegates; and develop an online report and guide aimed at physicians interested in management and leadership that would include the advantages and disadvantages of various educational options."	Adopted at I-14. This resolve from substitute Resolution 918 was adopted in lieu of original 918 at I-14. It became the first clause of D-295.316.	2014-2016: Conducted qualitative study to evaluate the market for physician leadership training and development and test potential demand for an AMA-led program. Study revealed an interest for this type of curriculum, that leadership training programs already exist, and that such programs would be best delivered to medical students and residents before they start their careers. Also determined saturation of physician leadership training market from state and specialty medical associations that offer courses, regional programs (e.g., The Physician Leadership Project), physician-specific MBAs (e.g., University of Tennessee), and membership (e.g., American Association for Physician Leadership). Conducted an environmental scan to identify physician-focused leadership programs offered through state and specialty associations. Findings noted several organizations offer leadership training, CME, conferences, programs, and other types of development for

		physicians. Many states partner with universities to offer programs. While there seems to be strong interest in "physician leadership training," the definition and scope of this term varies. Interests range from mentoring, coaching, webinars, and certificate programs to an MBA. Likewise, topical interests range from traditional leadership topics such as management to broader issues around finance, revenue cycle, and quality outcomes. As a result of this research, AMA to develop leadership-related content for physicians specific to topics where the AMA has unique expertise at both at the individual and practice levels. In 2015, partnered with the American Association for Physician Leadership (AAPL) in a joint leadership initiative to develop multiple leadership courses and organize a large conference in early 2016. Registration for the conference was extremely low, and the event was cancelled. The partnership with AAPL was discontinued.
2. "Our AMA will work with key stakeholders to advocate for collaborative programs among medical schools, residency programs, and related schools of business and management to better prepare physicians for administrative, financial and leadership responsibilities in medical management."	Adopted at I-14 and amended at A-18. This resolve from substitute Resolution 918 was adopted in lieu of original 918 at I-14. It became the second clause of D-295.316. Resolution 313 at A-18 amended this clause by addition.	In 2014, AMA contacted the AAMC, AOA, and AACOM to inform them of the new policy. It was also transmitted to each medical school, residency program director, directors of medical education at U.S. teaching hospitals, and other interested groups via the AMA MedEd Update e-newsletter. Further, the AMA Section on Medical Schools (now called the Academic Physician Section) was encouraged to advocate on behalf of the issue.
3a. "Our AMA will advocate for and support the creation of leadership programs and curricula that emphasize experiential and active learning models to include knowledge, skills and management techniques integral to achieving personal and professional financial literacy and leading interprofessional team care, in the spirit of the AMA's Accelerating Change in Medical Education initiative;"	This clause from substitute resolution 306 was adopted in lieu of original 306 at I-16, and subsequently appended to D-295.316 as clause 3a. Resolution 313 at A-18 amended this clause by addition.	In 2016, AMA contacted the AAMC, ACGME, and LCME to inform them of the new policy. It was also communicated to each medical school, residency program director, directors of medical education at U.S. teaching hospitals, and other interested groups via an article in the AMA MedEd Update e-newsletter. In 2018, amended policy was communicated to the HOD, AMA members, and interested organizations via an AMA Wire article.
3b. "Our AMA will advocate with the Liaison Committee for Medical	Adopted at I-16 and amended at A-18.	

Education, Association of American Medical Colleges and other governing bodies responsible for the education of future physicians to implement programs early in medical training to promote the development of leadership and personal and professional financial literacy capabilities."	This clause from resolution 306 was adopted as amended at I-16, and subsequently appended to D-295.316 as clause 3b. Resolution 313 at A-18 amended this clause by addition.	

APPENDIX B
Relevant AMA Policy

H-235.981, Qualifications, Selection, and Role of Medical Directors, Chief Medical Officers, Vice Presidents for Medical Affairs, and Others Employed by or Under Contract with Hospitals/Health Systems to Provide Medical Management Services

1. Our AMA supports the following guidelines regarding the qualifications and selection of individuals employed by or under contract with a hospital/health system to provide medical management services, such as medical directors, chief medical officers, and vice presidents for medical affairs:

a. The hospital governing body, management, and medical staff should jointly: (i) determine if there is a need to employ or contract with one or more individuals to provide medical management services; (ii) establish the purpose, duties, and responsibilities of these positions; (iii) establish the qualifications for these positions; and (iv) establish and sustain a mechanism for input from and participation by elected leaders of the medical staff in the selection, evaluation, and termination of individuals holding these positions.

b. An individual employed by or under contract with a hospital or health system to provide medical management services should be a physician (MD/DO).

c. A physician providing medical management services at a single hospital should be licensed to practice medicine in the same state as the hospital for which he or she provides such services. Additionally, he or she should be a member in good standing of the organized medical staff of the hospital for which he or she provides medical management services.

d. Where feasible, a physician providing medical management services at the system level for a multi-hospital health system should be licensed to practice medicine in each of the states in which the health system has a hospital that will be influenced by the physician's work. At a minimum, the physician should be licensed in at least one state in which the health system has a hospital over which the physician will exert influence, and in as many other states as may be required by state licensing law.

e. Where feasible, a physician providing medical management services at the system level for a multi-hospital health system should be a member in good standing of the medical staff of each of the hospitals that will be influenced by the physician's work. At a minimum, the physician should: (i) be a member in good standing of at least one of the medical staffs of the hospitals that will be influenced by the physician's work; and (ii) work in collaboration with elected medical staff leaders throughout the system and with any individuals who provide medical management services at the hospital level.

2. Our AMA supports the following guidelines regarding the role of the organized medical staff vis-a-vis individuals employed by or under contract with hospitals/health systems to provide medical management services:

a. The purpose, duties, and responsibilities of individuals employed by or under contract with the hospital/health system to provide medical management services should be included in the medical staff bylaws and in the hospital/health system corporate bylaws.

b. The organized medical staff should maintain overall responsibility for the quality of care provided to patients by the hospital, including the quality of the professional services provided by individuals with clinical privileges, and should have the responsibility of reporting to the governing body.

c. The chief elected officer of the medical staff should represent the medical staff to the administration, governing body, and external agencies.

d. Government regulations that would mandate that any individual not elected or appointed by the medical staff would have authority over the medical staff should be opposed.

H-405.990, Physician Managers
The AMA advocates (1) compiling and making available to interested medical students, residents, and practicing physicians information on management career opportunities and educational programs; (2) liaison activities with recognized national organizations that represent the interests of physician managers, and (3) continued efforts to collect and disseminate relevant and useful data pertaining to physician managers.

H-445.984, Training Physicians and Physicians-in-Training in the Art of Public Speaking H-445.984
1. Physicians who want to learn more about public speaking can leverage existing resources both within and outside the AMA. AMA can make public speaking tips available through online tools and resources that would be publicized on our website. Physicians and physicians-in-training who want to publicly communicate about the AMA's ongoing work are invited to learn more through the AMA Ambassador program. Meanwhile, STEPS Forward provides helpful tips to physicians and physicians-in-training wanting to improve communication within their practice and AMPAC is available for physicians and physicians-in-training who want to advocate and communicate about the needs of patients, physicians, and physicians-in-training in the pursuit of public office. There are also resources provided to physicians and physicians-in-training at various Federation organizations and through the American Association of Physician Leadership (AAPL) to support those who are interested in training of this nature. Because public speaking is a skill that is best learned through practice and coaching in a small group or one-on-one setting, we also encourage individuals to pursue training through their state or specialty medical society or through a local chapter of Toastmasters International. The Board of Trustees recommends that the AMA's Enterprise Communications and Marketing department work to develop online tools and resources that would be published on the AMA website to help physicians and physicians-in-training learn more about public speaking.
2. Our AMA will offer live education sessions at least annually for AMA members to develop their public speaking skills.

RERERENCES

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8. CHALLENGES TO PRIMARY SOURCE VERIFICATION OF INTERNATIONAL MEDICAL GRADUATES RESULTING FROM INTERNATIONAL CONFLICT

Reference committee hearing: see report of Reference Committee C.

HOUSE ACTION: RECOMMENDATIONS ADOPTED AS FOLLOWS
REMAINDER OF REPORT FILED
See Policy D-275.989

American Medical Association (AMA) Policy D-255.975, "Hardship for International Medical Graduates from Russia and Belarus," calls for the following action:

> "Our AMA will study the impact of the current political crisis on international medical graduates with medical degrees from Russia and Belarus who are already in the U.S. either in training or practicing in regards to their ability to obtain primary source verification and report back during the 2022 Interim House of Delegates meeting."

The resolution that led to the policy was adopted at the 2022 Annual Meeting of the AMA House of Delegates (HOD). This report is in response to that policy.

BACKGROUND

Russia, with the support of Belarus, invaded Ukraine on February 24, 2022. This action precipitated sanctions of the invading countries by the international community, including the U.S., which significantly reduced communication to and from organizations in Belarus and Russia, to include postal mail, internet, and receipt and origination of electronic payments. These gaps in communications may affect international medical graduates (IMGs) in the U.S. who completed medical school in Russia or Belarus, and who may require primary source verification for purposes of obtaining licensure or credentialing.

One of the key organizations involved in such verification and assistance of IMGs is the Educational Commission for Foreign Medical Graduates (ECFMG), a member of Intealth, an integrated organization that also includes the Foundation for Advancement of International Medical Education and Research (FAIMER™). Certification by ECFMG is the standard for evaluating the qualifications of these physicians before they enter U.S. graduate medical education (GME). ECFMG Certification also is a requirement for IMGs to take Step 3 of the three-step United States Medical Licensing Examination® (USMLE®) and to obtain an unrestricted license to practice medicine in the United States.

The ECFMG provides other programs for IMGs pursuing U.S. GME, including those that 1) assist them with the process of applying for U.S. GME positions and 2) sponsor foreign nationals for the J-1 visa for the purpose of participating in such programs. The ECFMG also offers a verification service that allows GME programs, state medical boards, hospitals, and credentialing agencies in the United States to obtain primary-source confirmation that their IMG applicants are ECFMG-certified.[1]

A little over a month after the invasion, on March 31, 2022, the ECFMG announced that it was pausing certification services requested by Russian citizens residing in Russia.[2] The ECFMG statement reflected concern for the health and safety of all medical school students and graduates as they pursue their medical education and training. The statement also noted that 30 Russian physicians and 10 Ukrainian physicians were selected in the 2022 Match for positions in U.S. training programs; ECFMG noted that it would do its best to assist those seeking J-1 visas.

RELEVANT AMA POLICIES

The AMA has a number of policies reflecting support for IMGs and their significant role in providing health care services in the U.S., as highlighted in the appendix. That said, AMA policy does not specifically address the issue of physicians in the U.S. who are from countries that are sanctioned by the international community and the resulting impact on primary source verification of their medical education for the purposes of licensure, certification, and credentialing.

Existing policy D-275.989, "Credentialing Issues," asks that the AMA encourage "state medical licensing boards, the Federation of State Medical Boards, and other credentialing entities to accept the Educational Commission for Foreign Medical Graduates certification as proof of primary source verification of an IMG's international medical education credentials." If credentialing organizations follow this recommendation, that obviates the need for communication to foreign schools or government agencies to obtain the requested documentation.

RELEVANT POLICY FROM THE WORLD MEDICAL ASSOCIATION

Founded in 1947, the World Medical Association (WMA) is a non-governmental, not-for-profit voluntary organization representing 9 million physicians from 115 national medical associations. The WMA's areas of interest comprise ethical, educational, social, public health, and medical practice concerns, among others. The AMA has a delegation to the WMA and is involved in proposing and revising WMA policies, which help inform global health policy.[3]

A recent search of WMA policy found nothing that specifically mentions primary source verification or support for IMGs from Russia and Belarus. The policy "Ethical Guidelines for the International Migration of Health Workers"[4] includes the following recommendations:

> 5) Physicians should not be prevented from leaving their home or adopted country to pursue career opportunities in another country.
>
> 8) Nothing should prevent countries from entering into bilateral agreements and agreements of understanding, as provided for in international law and with due cognizance of international human rights law, so as to effect meaningful co-operation on health care delivery, including the exchange of physicians.

The above policy also underscores the World Health Organization (WHO) Global Code of Practice on the International Recruitment of Health Personnel,[5] which specifies ethical and equitable recruitment principles, but again no specific mention is made of primary source verification or challenges to such recruitment and verification of credentials in the case of war and/or conflict.

Other tangentially relevant WMA policies include two resolutions (both adopted in October 2022) on humanitarian and medical aid[6] and support for medical personnel and citizens[7] that specifically mention the Russian invasion and the resulting impact on Ukraine.

DISCUSSION

Policy D-255.975 stipulates the study of IMGs "with medical degrees from Russia and Belarus who are already in the U.S. either in training or practicing" in regard to concerns for primary source verification of their education. The ECFMG statement, in contrast, specifically paused certification services requested by Russian citizens residing in Russia (not Belarus)—it was not directed at those Russian citizens already in the U.S., as described in the resolution.

In the case of the invasion of Ukraine, damages to and interruptions of the country's technological infrastructure would seem to present even greater challenges to the provision of needed documents to the U.S. than those of Russia and Belarus. The resolution does not mention this aspect.

It is important to note that, if a physician is already in GME, that individual is primary source verified, as such verification is a requirement for entry to GME (personal communication with senior ECFMG staff, February 7, 2023). Even those IMGs arriving this year to commence GME are likely to have already had their documents verified when they started the certification process (which typically takes place over a three-year period). In other

words, the impact on credentials verification arising from any international conflict or cessation of diplomatic relations between the U.S. and another country is delayed, so if the situation continues past three years, the negative impacts to primary source verification rise.

ECFMG staff also indicated that the ECFMG pursues alternative options if the customary primary source verification process is not workable—for example, when there is international conflict or the medical school or ministry of health in a given country is not responding to ECFMG queries. Through one alternative option, the applicant for ECFMG certification can request that three medical school classmates or faculty who are now practicing in the U.S. swear on their U.S. medical license that the applicant did indeed graduate. This process requires completion of a notarized form and submission of a letter describing the facts of the matter. The ECFMG tries to assist individual applicants throughout the certification process (while maintaining the integrity of its procedures), to include postponement of examinations and refunding fees, where appropriate.

Because of the relatively low number of IMGs currently in U.S. GME programs from Russia, Belarus, and Ukraine—217, 36, and 115, respectively, according to 2022 data from the AMA GME Database—the extent of the impact of the Ukraine conflict on primary source verification is limited in scope. ECFMG staff noted that, from a historical perspective, the cessation of communication from Russia to any U.S. agency during the 1990s, the embargo with Cuba, and the Gulf wars in Iraq and Iran presented significantly greater difficulties to obtaining primary source verification of medical education. Nonetheless, due to the history of challenges associated with primary source verification for IMGs, the Council on Medical Education—with input from the IMG Section—will regularly engage with the ECFMG to monitor the impact of conflicts on primary source verification of medical education and report back to the HOD as needed.

SUMMARY AND RECOMMENDATIONS

Even aside from international conflict and war, and public health disruptions such as the COVID-19 pandemic, there are many challenges to primary source verification of IMGs. Despite the internet and email technologies, the obstacles of international communication and retention of appropriate educational records by countries of origin continue to present difficulties for IMGs. The cessation of international bank payments and transfers, due to sanctions put in place by the international community in response to the invasion, can also hinder requests for primary source documentation.

The impacts of the war in Ukraine on primary source verification of physicians from Russia and Belarus have been relatively limited—in part due to the small number of IMGs in the U.S. from those countries. In addition, the ECFMG has been responsive to the situation and has in place multiple alternative methods for verifying an IMG's medical education credentials. That said, the Council on Medical Education will continue to monitor this situation, as well as other conflicts or wars that may delay primary source verification of IMGs' medical education, and report back to the HOD as needed.

As noted above, existing AMA policy D-275.989, "Credentialing Issues," is the most relevant policy to the question posed by the resolution and is therefore recommended for reaffirmation through this report. Widespread acceptance by credentialing agencies of ECFMG certification would provide relief to ECGMG-certified IMGs from any country as they seek initial or renewed medical certification, licensure, or credentials in the U.S.

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

1. That American Medical Association (AMA) Policy D-275.989, "Credentialing Issues," be amended as follows:

   Our AMA encourages state medical licensing boards, the Federation of State Medical Boards, and other credentialing entities to accept ~~the Educational Commission for Foreign Medical Graduates~~ certification by the Educational Commission for Foreign Medical Graduates (a member of Intealth) as proof of primary source verification of an IMG's international medical education credentials.

2. That AMA Policy D-255.975, "Hardship for International Medical Graduates from Russia and Belarus," be rescinded, as having been fulfilled by this report:

~~"Our AMA will study the impact of the current political crisis on international medical graduates with medical degrees from Russia and Belarus who are already in the U.S. either in training or practicing in regards to their ability to obtain primary source verification and report back during the 2022 Interim House of Delegates meeting."~~

APPENDIX: RELEVANT AMA POLICY

H-255.966, "Abolish Discrimination in Licensure of IMGs"

1. Our AMA supports the following principles related to medical licensure of international medical graduates (IMGs): . . .

C. Discrimination against physicians solely on the basis of national origin and/or the country in which they completed their medical education is inappropriate. . . .

(BOT Rep. 25, A-15; Appended: CME Rep. 4, A-21)

H-255.988, "AMA Principles on International Medical Graduates"

Our AMA supports: . . .

8. The AMA continues to support the activities of the ECFMG related to verification of education credentials and testing of IMGs.

9. That special consideration be given to the limited number of IMGs who are refugees from foreign governments that refuse to provide pertinent information usually required to establish eligibility for residency training or licensure. . . .

22. The Federation of State Medical Boards, its member boards, and the ECFMG in their willingness to adjust their administrative procedures in processing IMG applications so that original documents do not have to be recertified in home countries when physicians apply for licenses in a second state. . . .

24. Continued study of challenges and issues pertinent to IMGs as they affect our country's health care system and our physician workforce. . . .

(BOT Rep. Z, A-86; Reaffirmed: Res. 312, I-93; Modified: CME Rep. 2, A-03; Reaffirmation I-11; Reaffirmed: CME Rep. 1, I-13; Modified: BOT Rep. 25, A-15; Modified: CME Rep. 01, A-16; Appended: Res. 304, A-17; Modified: CME Rep. 01, I-17; Reaffirmation: A-19; Modified: CME Rep. 2, A-21; Modified: CME Rep. 1, A-22; Modified: CCB/CLRPD Rep. 1, A-22)

D-275.989, "Credentialing Issues"

Our AMA encourages state medical licensing boards, the Federation of State Medical Boards, and other credentialing entities to accept the Educational Commission for Foreign Medical Graduates certification as proof of primary source verification of an IMG's international medical education credentials.

(CME Rep. 3, A-02 Appended: CME Rep. 10, A-11 Modified: CME Rep. 1, A-21)

H-275.978, "Medical Licensure"

Our AMA . . . (20) urges that documentation of graduation from a foreign medical school be maintained by boards providing an initial license, and that the documentation be provided on request to other licensing boards for review in connection with an application for licensure by endorsement;

(CME Rep. A, A-87; BOT Rep. I-93-13; CME Rep. 10 - I-94; Modified: Sunset Report, I-97; Reaffirmation A-04; Reaffirmed: CME Rep. 3, A-10; Reaffirmation I-10; Reaffirmed: CME Rep. 6, A-12; Appended: Res. 305, A-13;

Reaffirmed: BOT Rep. 3, I-14; Modified: CME Rep. 1, A-18; Appended: CME Rep. 3, I-19; Modified: CME Rep. 2, A-21)

D-275.975, "Sharing of Medical Disciplinary Data Among Nations"

Our AMA will, in conjunction with the Federation of State Medical Boards, support the efforts of the International Association of Medical Regulatory Authorities in its current efforts toward the exchange of information among medical regulatory authorities worldwide.

(Res. 318, A-05; Reaffirmed: CME Rep. 1, A-15)

REFERENCE

1 Educational Commission for Foreign Medical Graduates. About Us. Available at: https://www.ecfmg.org/about/. Accessed January 15, 2023.

2 Statement on Providing Services to Applicants in Russia. Educational Commission for Foreign Medical Graduates. Available at: https://www.ecfmg.org/news/2022/03/31/statement-on-providing-services-to-applicants-in-russia/. Accessed January 15, 2023.

3 AMA leadership and policy development through the World Medical Association. American Medical Association Office of International Relations. Available at: https://www.ama-assn.org/about/office-international-relations/ama-leadership-and-policy-development-through-world-medical. Accessed January 18, 2023.

4 Ethical Guidelines for the International Migration of Health Workers. World Medical Association. Available at: https://www.wma.net/policies-post/wma-statement-on-ethical-guidelines-for-the-international-migration-of-health-workers/. Accessed January 16, 2023.

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6 WMA Resolution on Humanitarian and Medical Aid to Ukraine. World Medical Association. Available at: https://www.wma.net/policies-post/wma-resolution-on-humanitarian-and-medical-aid-to-ukraine/. Accessed January 20, 2023.

7 WMA Resolution in support of Medical Personnel and Citizens of Ukraine in the face of the Russian invasion. World Medical Association. Available at: https://www.wma.net/policies-post/wma-resolution-in-support-of-medical-personnel-and-citizens-of-ukraine-in-the-face-of-the-russian-invasion/. Accessed January 2, 2023.

9. THE IMPACT OF MIDLEVEL PROVIDERS ON MEDICAL EDUCATION (RESOLUTION 201-A-22)

Reference committee hearing: see report of Reference Committee C.

HOUSE ACTION: **RECOMMENDATIONS ADOPTED AS FOLLOWS IN LIEU OF RESOLUTION 201-A-22 REMAINDER OF REPORT FILED**
See Policies H-295.849 and D-295.934

Resolution 201-A-22, "The Impact of Midlevel Providers on Medical Education," was authored by the American Medical Association (AMA) Resident and Fellow Section and submitted to the 2022 Annual Meeting of the House of Delegates (HOD). The resolution reads as follows:

> RESOLVED, That our American Medical Association study, using surveys among other tools that protect identities, how commonly bias against physician-led healthcare is experienced within undergraduate

medical education and graduate medical education, interprofessional learning and team building work and publish these findings in peer-reviewed journals (Directive to Take Action); and be it further

RESOLVED, That our AMA work with the Liaison Committee on Medical Education and the Accreditation Council for Graduate Medical Education to ensure all physician undergraduate and graduate training programs recognize and teach physicians that they are the leaders of the healthcare team and are adequately equipped to diagnose and treat patients independently only because of the intensive, regulated, and standardized education they receive (Directive to Take Action); and be it further

RESOLVED, That our AMA study the harms and benefits of establishing mandatory postgraduate clinical training for nurse practitioners and physician assistants prior to working within a specialty or subspecialty field (Directive to Take Action); and be it further

RESOLVED, That our AMA study the harms and benefits of establishing national requirements for structured and regulated continued education for nurse practitioners and physician assistants in order to maintain licensure to practice. (Directive to Take Action)

The resolution was subsequently referred by the HOD for a report back the House; this report is in response to the referral.

BACKGROUND

Concerns expressed by the resolution's authors

The resolution stipulates concerns with interprofessional education as well as the training and practice of nonphysicians. For example, the authors claim that physicians are being reprimanded or fired for speaking out about discrepancies between physician and nonphysician training. In addition, concern is expressed about the growth in the number of graduate-level training programs for nonphysicians, even though they are not required to pursue such training, as well as the lack of any requirement for equivalent continuing education by nonphysicians, versus the need for physicians to pursue such education to maintain board certification, state licensure, and often hospital credentials. Finally, the resolution notes that midlevel providers are free to move between various fields of medicine without any formal, regulated training or education, but physicians are limited to the scope of their specialty of medicine by credentialing and board certification.

Note: The term "advanced practice providers," including but not limited to nurse practitioners (NPs) and physician assistants (PAs), is often used instead of "midlevel providers." This report is primarily concerned with these two fields.

Reference Committee C testimony on the resolution

The report of Reference Committee B at the 2022 Annual Meeting reflected the mixed testimony on this item of business, including input from multiple specialties. Testimony highlighted that the AMA has extensive policy on scope of practice, including support for physician-led team-based care, as well as policy that medical education should prepare students to practice in physician-led teams and that physician-led interprofessional education should be incorporated into medical education and residency programs. Support was also expressed for interprofessional collaboration and the role of nonphysicians as important members of the care team. General support was heard for further studies about scope of practice, but testimony did note that the AMA already has extensive information and existing resources outlining the differences in graduate education and training of nonphysicians versus physicians. It was also noted that the directives in Resolution 201 were not feasible or could be costly to implement. In addition, the AMA does not have direct authority over graduate clinical training or continuing education requirements for nonphysicians. These requirements are set by each health profession's accrediting, certifying, and licensing bodies, who may not align themselves with AMA policies. For these reasons, the resolution was recommended for referral by Reference Committee C; the HOD concurred with this decision.

Council on Medical Education testimony on the resolution

In its testimony before Reference Committee B, the AMA Council on Medical Education stated its opposition to adoption of Resolution 201-A-22, noting the lack of feasibility of performing a study regarding bias against physician-led teams in medical education and practice. In addition, the Council noted that having such a study accepted and published in a peer-reviewed journal is outside the AMA's purview and control. Similarly, the AMA has no authority over the education or licensure of other health care professionals, such that study of the education of these professionals, as requested in the third and fourth resolved clauses, would be difficult to accomplish and the recommendations from such a study are unlikely to be adopted by the affected professions. Finally, the Council noted that its Report 5-A-22, "Education, Training, and Credentialing Of Non-Physician Health Care Professionals and Their Impact on Physician Education and Training (Resolution 305-J-21, Resolve 8)," addressed some of the issues outlined in Resolution 201-A-22. This report led to AMA policy regarding learning about educational differences between physicians and nonphysician health care professionals as well as supporting institutional oversight of training programs of nonphysicians and their impact on medical education.

DISCUSSION

Difficulty in fielding a study of bias in interprofessional education

Resolve 1 of the referred resolution asks that the AMA "study, using surveys among other tools that protect identities, how commonly bias against physician-led healthcare is experienced within undergraduate medical education and graduate medical education, interprofessional learning and team building work and publish these findings in peer-reviewed journals." Investigators studying this issue would first need to perform qualitative analyses of episodes of interprofessional learning and team building work in medical education settings to describe the degree and nature of bias against physician-led health care, if any. These findings would then inform surveys of medical students and resident/fellow physicians of their experience with interprofessional learning and team building work to determine the scope of the biases described by the qualitative research. Investigators would require financial support to perform rigorous, statistically valid, high-quality studies that would be accepted for publication by peer-reviewed journals. This research is beyond the scope of the AMA; however, the AMA can encourage investigators to study how interprofessional learning and team building work promotes the development of physician leadership in team-based care.

"Team sport:" The rise of the health care team

Since World War II, medicine has seen the rapid development of new diagnostic, therapeutic, and procedural techniques to improve the quality of patient care. Similarly, medicine has recognized other factors influencing health outcomes, including population health,[1] structural and social determinants of health,[2] and other key domains of health systems science.[3] To address both the rapid growth in medical science and technology and increased complexity of delivering high quality health care, medicine has become increasingly specialized,[4] with concordant expansion of nonphysician members of the health care team. Accordingly, as team leader, the physician must understand the appropriate role of each team member and ensure appropriate communication and coordination of care for the patient's benefit.[5] Hospitals, academic practices, and health care systems have increasingly adopted the physician-led team as the preferred model for high-quality health care, highlighting the need for incorporating these principles into medical education and training.

As physicians became increasingly specialized, PA and NP programs were established in the 1960s, followed by the founding of the American Board of Family Medicine in 1969, to address the workforce shortage in primary care. In addition, with the advances in the care of acute health conditions, chronic disease management and the "new morbidities," [6] conditions arising from social, behavioral, and developmental issues, began to dominate medical practice, demanding multi-disciplinary teams to deliver high-quality care. Research on high-performing primary care showed that access to primary care improved health outcomes, lowered health care spending, and decreased health disparities.[7] The benefits of high-performing primary care depend on patients having a trusted, continuous relationship with a personal primary care physician who leads and coordinates the patients' health care team, also referred to as the medical home as defined in policy H-160.919, "Principles of the Patient-Centered Medical Home."

Central to achieving optimal health outcomes is the need to define the role of the physician in team-based care as the leader of the health care team. Because of the longer, more intensive education and evaluation requirements in the medical profession compared to other health care fields, a physician is the most qualified health professional to lead the care team in education and practice. The AMA has extensive policy supporting physician-led team-based care and believes it is appropriate to reinforce this concept within medical education, through which the privilege of leadership is earned. In addition, the AMA's ChangeMedEd initiative provides a real-life laboratory for investigation of educational approaches to teach the primacy of the physician-led team in medical education as the optimal model for ensuring quality of patient care.

Medical education accreditation standards related to interprofessional education

To ensure the quality of medical education and to implement recommended educational revisions in response to the needs of medical students and resident/fellow physicians, as well as society and patients, is a key role of accrediting bodies, including the Liaison Committee on Medical Education (LCME) and Accreditation Council for Graduate Medical Education (ACGME) in undergraduate and graduate medical education, respectively. Resolve 2 of the referred resolution asks the AMA to "work with the Liaison Committee on Medical Education and the Accreditation Council for Graduate Medical Education to ensure all physician undergraduate and graduate training programs recognize and teach physicians that they are the leaders of the healthcare team and are adequately equipped to diagnose and treat patients independently only because of the intensive, regulated, and standardized education they receive." Interprofessional education and practice are intended to ensure that all members of the team learn to practice as part of a physician-led health care team.

Physicians, as team leaders, need to understand other members of the health care team's roles as well as their differences in education and training. Medical education should include knowledge of the differences in the education and professional standards of other health professionals in the health care team.

Current LCME and ACGME accreditation standards support interprofessional education. LCME standards[8] include two pertinent elements:

- 6.7 Academic Environments

  The faculty of a medical school ensure that medical students have opportunities to learn in academic environments that permit interaction with students enrolled in other health professions, graduate and professional degree programs, and in clinical environments that provide opportunities for interaction with physicians in graduate medical education programs and in continuing medical education programs.

- 7.9 Interprofessional Collaborative Skills

  The faculty of a medical school ensure that the core curriculum of the medical education program prepares medical students to function collaboratively on health care teams that include health professionals from other disciplines as they provide coordinated services to patients. These curricular experiences include practitioners and/or students from the other health professions.

The ACGME Common Program Requirements[9] contain multiple references to interprofessional education:

- Residents must demonstrate competence in . . . working in interprofessional teams to enhance patient safety and improve patient care quality;
- The program must have a structure that promotes safe, interprofessional, team-based care
- Optimal patient safety occurs in the setting of a coordinated interprofessional learning and working environment.
- Residents must participate as team members in real and/or simulated interprofessional clinical patient safety activities, such as root cause analyses or other activities that include analysis, as well as formulation and implementation of actions
- Residents must have the opportunity to participate in interprofessional quality improvement activities
- Residents must care for patients in an environment that maximizes communication. This must include the opportunity to work as a member of effective interprofessional teams that are appropriate to the delivery of care in the specialty and larger health system.

Both sets of standards help underscore that interprofessional education is a priority in medical education. That said, these standards could be expanded and strengthened to state that physicians' education and training make them uniquely qualified to lead the health care team, as reflected in AMA policy. In addition, it would be within the scope of the AMA to advocate for insertion of qualifying modifiers in these standards where warranted—for example, inclusion of the phrase "physician-led" to modify "interprofessional teams." This report includes a recommendation to that effect. Personal communication with LCME staff indicates that this change would be appropriate.

While interprofessional education is important, residency programs and their sponsoring institutions need to ensure that the presence of other health professionals in the clinical setting does not negatively impact resident education, including ensuring that residents have the appropriate responsibility for patient care, case numbers, and case mix to prepare them for independent practice. The ACGME's Common Program Requirements state, in this regard, that "The presence of other learners and other care providers, including, but not limited to, residents from other programs, subspecialty fellows, and advanced practice providers, must enrich the appointed residents' education."[10] This concept is reflected in Policy H-310.913, "Physician Extenders," which notes in part that "procedural training is a critical portion of resident education and the augmentation of patient care by nonphysician practitioners should not interfere with a resident's ability to achieve competence in the performance of required procedures."

Education and training of other health professionals

The AMA does not directly oversee the education and training of nonphysician health care professionals. For several decades, beginning in the 1930s, the Council on Medical Education did have oversight over accreditation of a significant number of allied health education programs including physician assistants through its Committee on Allied Health Education and Accreditation, or CAHEA. By the early to mid-1990s, that work was seen as outside the scope of the AMA and ceased, leading to development of the Commission on Accreditation of Allied Health Education Programs and other accreditation bodies to continue this essential role.

Despite this lack of direct oversight, the AMA can call on standard-setting organizations, such as the American Board of Medical Specialties, to play a more active role in communicating with policymakers the standards to which physicians are held, including maintenance of certification, and why these standards serve as the basis for physician leadership of the health care team.

Resolves 3 and 4 of the referred resolution encompass AMA study of establishing "mandatory postgraduate clinical training for nurse practitioners and physician assistants prior to working within a specialty or subspecialty field" and "national requirements for structured and regulated continued education for nurse practitioners and physician assistants in order to maintain licensure to practice."

For NPs, five different certifying bodies offer 19 different certificates in various fields of medicine.[11] Certification is required to obtain state licensure for practice as an NP. Similarly, PAs seeking to practice must obtain the PA-C certification. In addition, the National Commission on Certification of Physician Assistants currently offers 10 certificates of added qualifications (CAQs) in various fields (the CAQ is a voluntary credential and does not replace PA-C certification).[12] To obtain one of these CAQs, a PA-C must have between 2 to 4 years of experience in the field. Since 2011, nearly 2,800 PA-Cs have earned CAQs in seven different specialties.

In summary, the third and fourth Resolves of the referred resolution are neither feasible nor enforceable as our AMA does not have the authority or purview over post-graduate clinical training or continuing education requirements for nonphysicians. These requirements are set by the individual profession's accrediting, certifying, and licensing bodies. In addition, the AMA does not have the ability to conduct a study on harms and benefits of additional training and certification requirements for NPs and PAs to work as licensed professionals.

RELEVANT AMA POLICY

The AMA has several policies in support of interprofessional education. For example, Policy D-295.934, "Encouragement of Interprofessional Education Among Health Care Professions Students," specifies the phrase "physician-led" in its verbiage:

> 2. Our AMA supports the concept that medical education should prepare students for practice in physician-led interprofessional teams.

In addition, the policy (most recently amended via Council on Medical Education Report 5-A-22) includes language that encompasses the spirit of and obviates the need for Resolve 3 of Resolution 201-A-22:

> Our AMA supports a clear mechanism for medical school and appropriate institutional leaders to intervene when undergraduate and graduate medical education is being adversely impacted by undergraduate, graduate, and postgraduate clinical training programs of non-physicians.

Other relevant policies are noted in the appendix, to include H-160.912, "The Structure and Function of Interprofessional Health Care Teams," which uses the term "physician-led" in three of its six clauses. Indeed, this policy provides a road map to the appropriate interprofessional education of medical students and resident/fellow physicians to take on the pivotal responsibility of leadership:

4. Our AMA adopts the following principles to guide physician leaders of health care teams:
    a. Focus the team on patient and family-centered care.
    b. Make clear the team's mission, vision and values.
    c. Direct and/or engage in collaboration with team members on patient care.
    d. Be accountable for clinical care, quality improvement, efficiency of care, and continuing education.
    e. Foster a respectful team culture and encourage team members to contribute the full extent of their professional insights, information and resources.
    f. Encourage adherence to best practice protocols that team members are expected to follow.
    g. Manage care transitions by the team so that they are efficient and effective, and transparent to the patient and family.
    h. Promote clinical collaboration, coordination, and communication within the team to ensure efficient, quality care is provided to the patient and that knowledge and expertise from team members is shared and utilized.
    i. Support open communication among and between the patient and family and the team members to enhance quality patient care and to define the roles and responsibilities of the team members that they encounter within the specific team, group, or network.
    j. Facilitate the work of the team and be responsible for reviewing team members' clinical work and documentation.
    k. Review measures of 'population health' periodically when the team is responsible for the care of a defined group.

It should also be noted that existing AMA policy supports advocacy and action to allow for appropriate intervention when undergraduate and graduate medical education are adversely affected by undergraduate, graduate, and postgraduate clinical training programs for nonphysicians (as stated in Policy D-295.934 (6), "Encouragement of Interprofessional Education Among Health Care Professions Students," which resulted from CME Report 5-A-22). In short, the AMA has clear and extensive policy supporting physician-led team-based care, as well as policy that medical education should prepare students to practice in physician-led teams and that physician-led interprofessional education should be incorporated into medical education and residency programs. Our AMA also supports interprofessional collaboration and the unique skills all health care professionals bring to the health care team.

SUMMARY AND RECOMMENDATIONS

Resolution 201-A-22 requests that the AMA conduct several studies related to the education of physicians in interprofessional teams and the training and continuing education requirements of nurse practitioners and physician assistants. The Council on Medical Education would note that to perform the requested investigations such that they meet the standard for peer-reviewed publication would involve significant effort and resources that are beyond the

scope of the AMA. While the findings from such research could inform policymakers, it should be noted that the AMA does not have direct oversight over nonphysician education, training, and practice to directly implement changes based on such research.

Reinforcing the principle that interprofessional teams in education and practice are led by physicians is within the scope of the AMA and is a key element of its work to protect patients.
A number of AMA policies encompass interprofessional education, such as D-295.934, "Encouragement of Interprofessional Education Among Health Care Professions Students," and provide the policy basis for the AMA to advocate for the physician as the leader of the health care team. In addition, the AMA, through its Advocacy unit, plays an active and essential role in preventing inappropriate expansion of practice among nonphysician health care professionals. Part of this work is ensuring that health care teams are led by physicians and that nonphysicians have requisite physician supervision. For this reason, the Council makes the recommendations below to ensure use of the phrase "physician-led" to modify "interprofessional teams" in medical education accreditation standards.

As noted in this report, if preparation for physician practice does not include leadership of teams as a component, then this element should be incorporated into medical education. Toward this end, the Council would refer interested delegates to a second report slated for the 2023 Annual Meeting, Council on Medical Education Report 7-A-23, "Management and Leadership Training in Medical Education." This report seeks to "study the extent of the impact of AMA Policy D-295.316, 'Management and Leadership for Physicians,' on elective curriculum and "expand efforts to promote the tenets of health systems science to prepare trainees for leadership roles and address prevalent challenges in the practice of medicine and public health."

The Council on Medical Education therefore recommends that the following recommendations be adopted in lieu of Resolution 201-A-22 and the remainder of the report be filed:

1. That the American Medical Association (AMA) encourage appropriate medical education accreditation organizations in allopathic and osteopathic medicine including the Liaison Committee on Medical Education, Commission on Osteopathic College Accreditation, American Osteopathic Association, and Accreditation Council for Graduate Medical Education to:

   A) Incorporate the phrase "physician-led" as a modifier for "interprofessional education" into their relevant medical education accreditation standards, where appropriate;

   B) Require education in and evaluation of competency in physician-led interprofessional health care team leadership as part of the systems-based practice competency in medical education accreditation standards.

2. That the AMA encourage medical educators to study how interprofessional learning and teamwork promote the development of physician leadership in team-based care.

3. Amend D-295.934 (2) by addition as follows: "Our AMA supports the concept that medical education should prepare students for practice in, and leadership of, physician-led interprofessional health care teams."

4. That the AMA encourage medical standards-setting organizations, including the American Board of Medical Specialties and its member boards, to inform policymakers of the standards physicians are held to for independent practice in order to protect patients and that these standards make physicians the appropriate leaders of the interprofessional health care team.

APPENDIX: RELEVANT AMA POLICY

D-295.934, "Encouragement of Interprofessional Education Among Health Care Professions Students"

1. Our AMA recognizes that interprofessional education and partnerships are a priority of the American medical education system.
2. Our AMA supports the concept that medical education should prepare students for practice in physician-led interprofessional teams.

3. Our AMA will encourage health care organizations that engage in a collaborative care model to provide access to an appropriate mix of role models and learners.
4. Our AMA will encourage the development of skills for interprofessional education that are applicable to and appropriate for each group of learners.
5. Our AMA supports the concept that interprofessional education include a mechanism by which members of interdisciplinary teams learn about, with, and from each other; and that this education include learning about differences in the depth and breadth of their educational backgrounds, experiences, and knowledge and the impact these differences may have on patient care.
6. Our AMA supports a clear mechanism for medical school and appropriate institutional leaders to intervene when undergraduate and graduate medical education is being adversely impacted by undergraduate, graduate, and postgraduate clinical training programs of non-physicians.

(Res. 308, A-08; Appended: CME Rep. 1, I-12; Modified: CME Rep. 1, A-22; Appended: CME Rep. 5, A-22)

H-160.912, "The Structure and Function of Interprofessional Health Care Teams"

1. Our AMA defines 'team-based health care' as the provision of health care services by a physician-led team of at least two health care professionals who work collaboratively with each other and the patient and family to accomplish shared goals within and across settings to achieve coordinated, high-quality, patient-centered care.

2. Our AMA will advocate that the physician leader of a physician-led interprofessional health care team be empowered to perform the full range of medical interventions that she or he is trained to perform.

3. Our AMA will advocate that all members of a physician-led interprofessional health care team be enabled to perform medical interventions that they are capable of performing according to their education, training and licensure and the discretion of the physician team leader in order to most effectively provide quality patient care.

4. Our AMA adopts the following principles to guide physician leaders of health care teams:
   a. Focus the team on patient and family-centered care.
   b. Make clear the team's mission, vision and values.
   c. Direct and/or engage in collaboration with team members on patient care.
   d. Be accountable for clinical care, quality improvement, efficiency of care, and continuing education.
   e. Foster a respectful team culture and encourage team members to contribute the full extent of their professional insights, information and resources.
   f. Encourage adherence to best practice protocols that team members are expected to follow.
   g. Manage care transitions by the team so that they are efficient and effective, and transparent to the patient and family.
   h. Promote clinical collaboration, coordination, and communication within the team to ensure efficient, quality care is provided to the patient and that knowledge and expertise from team members is shared and utilized.
   i. Support open communication among and between the patient and family and the team members to enhance quality patient care and to define the roles and responsibilities of the team members that they encounter within the specific team, group or network.
   j. Facilitate the work of the team and be responsible for reviewing team members' clinical work and documentation.
   k. Review measures of 'population health' periodically when the team is responsible for the care of a defined group.

5. Our AMA encourages independent physician practices and small group practices to consider opportunities to form health care teams such as through independent practice associations, virtual networks or other networks of independent providers.

6. Our AMA will advocate that the structure, governance and compensation of the team should be aligned to optimize the performance of the team leader and team members.

(Joint CME-CMS Rep., I-12; Reaffirmation I-13; Reaffirmed: CMS Rep. 1, I-15; Reaffirmed: BOT Action in response to referred for decision: Res. 718, A-17)

D-35.985, “Support for Physician Led, Team Based Care”

Our AMA:

1. Reaffirms, will proactively advance at the federal and state level, and will encourage state and national medical specialty societies to promote policies H-35.970, H-35.973, H-35.974, H-35.988, H-35.989, H-35.992, H-35.993, H-160.919, H-160.929, H-160.947, H-160.949, H-160.950, H-360.987, H 405.969 and D-35.988.

2. Will identify and review available data to analyze the effects on patients? access to care in the opt-out states (states whose governor has opted out of the federal Medicare physician supervision requirements for anesthesia services) to determine whether there has been any increased access to care in those states.

3. Will identify and review available data to analyze the type and complexity of care provided by all non-physician providers, including CRNAs in the opt-out states (states whose governor has opted out of the federal Medicare physician supervision requirements for anesthesia services), compared to the type and complexity of care provided by physicians and/or the anesthesia care team.

4. Will advocate to policymakers, insurers and other groups, as appropriate, that they should consider the available data to best determine how non-physicians can serve as a complement to address the nation's primary care workforce needs.

5. Will continue to recognize non-physician providers as valuable components of the physician-led health care team.

6. Will continue to advocate that physicians are best qualified by their education and training to lead the health care team.

7. Will call upon the Robert Wood Johnson Foundation to publicly announce that the report entitled, "Common Ground: An Agreement between Nurse and Physician Leaders on Interprofessional Collaboration for the Future of Patient Care" was premature; was not released officially; was not signed; and was not adopted by the participants.

(BOT Rep. 9, I-11; Reaffirmed: CMS Rep. 1, A-12; Reaffirmed: CMS Rep. 07, A-17; Reaffirmed: CMS Rep. 10, A-19; Reaffirmed: CMS Rep. 6, A-21)

H-160.950, “Guidelines for Integrated Practice of Physician and Nurse Practitioner”

Our AMA endorses the following guidelines and recommends that these guidelines be considered and quoted only in their entirety when referenced in any discussion of the roles and responsibilities of nurse practitioners:

(1) The physician is responsible for the supervision of nurse practitioners and other advanced practice nurses in all settings.

(2) The physician is responsible for managing the health care of patients in all practice settings.

(3) Health care services delivered in an integrated practice must be within the scope of each practitioner's professional license, as defined by state law.

(4) In an integrated practice with a nurse practitioner, the physician is responsible for supervising and coordinating care and, with the appropriate input of the nurse practitioner, ensuring the quality of health care provided to patients.

(5) The extent of involvement by the nurse practitioner in initial assessment, and implementation of treatment will depend on the complexity and acuity of the patients' condition, as determined by the supervising/collaborating physician.

(6) The role of the nurse practitioner in the delivery of care in an integrated practice should be defined through mutually agreed upon written practice protocols, job descriptions, and written contracts.

(7) These practice protocols should delineate the appropriate involvement of the two professionals in the care of patients, based on the complexity and acuity of the patients' condition.

(8) At least one physician in the integrated practice must be immediately available at all times for supervision and consultation when needed by the nurse practitioner.

(9) Patients are to be made clearly aware at all times whether they are being cared for by a physician or a nurse practitioner.

(10) In an integrated practice, there should be a professional and courteous relationship between physician and nurse practitioner, with mutual acknowledgment of, and respect for each other's contributions to patient care.

(11) Physicians and nurse practitioners should review and document, on a regular basis, the care of all patients with whom the nurse practitioner is involved. Physicians and nurse practitioners must work closely enough together to become fully conversant with each other's practice patterns.

(CMS Rep. 15 - I-94; BOT Rep. 6, A-95; Reaffirmed: Res. 240, A-00; Reaffirmation A-00; Reaffirmed: BOT Rep. 28, A-09; Reaffirmed: BOT Rep. 9, I-11; Reaffirmed: Joint CME-CMS Rep., I-12; Reaffirmed: BOT Rep. 16, A-13)

H-160.906, “Models / Guidelines for Medical Health Care Teams”

1. Our AMA defines 'physician-led' in the context of team-based health care as the consistent use by a physician of the leadership knowledge, skills and expertise necessary to identify, engage and elicit from each team member the unique set of training, experience, and qualifications needed to help patients achieve their care goals, and to supervise the application of these skills.

2. Our AMA supports the following elements that should be considered when planning a team-based care model according to the needs of each physician practice:

Patient-Centered:
a. The patient is an integral member of the team.
b. A relationship is established between the patient and the team at the onset of care, and the role of each team member is explained to the patient.
c. Patient and family-centered care is prioritized by the team and approved by the physician team leader.
d. Team members are expected to adhere to agreed-upon practice protocols.
e. Improving health outcomes is emphasized by focusing on health as well as medical care.
f. Patients' access to the team, or coverage as designated by the physician-led team, is available twenty-four hours a day, seven days a week.
g. Safety protocols are developed and followed by all team members.

Teamwork:
h. Medical teams are led by physicians who have ultimate responsibility and authority to carry out final decisions about the composition of the team.
i. All practitioners commit to working in a team-based care model.
j. The number and variety of practitioners reflects the needs of the practice.
k. Practitioners are trained according to their unique function in the team.
l. Interdependence among team members is expected and relied upon.
m. Communication about patient care between team members is a routine practice.
n. Team members complete tasks according to agreed-upon protocols as directed by the physician leader.
Clinical Roles and Responsibilities:
o. Physician leaders are focused on individualized patient care and the development of treatment plans.
p. Non-physician practitioners are focused on providing treatment within their scope of practice consistent with their education and training as outlined in the agreed upon treatment plan or as delegated under the supervision of the physician team leader.
q. Care coordination and case management are integral to the team's practice.
r. Population management monitors the cost and use of care, and includes registry development for most medical conditions.

Practice Management:
s. Electronic medical records are used to the fullest capacity.
t. Quality improvement processes are used and continuously evolve according to physician-led team-based practice assessments.
u. Data analytics include statistical and qualitative analysis on cost and utilization, and provide explanatory and predictive modeling.
v. Prior authorization and precertification processes are streamlined through the adoption of electronic transactions.

(CMS Rep. 6, A-14; Reaffirmed: CMS Rep. 07, A-16; Reaffirmed: CMS Rep. 05, A-17)

H-360.987, "Principles Guiding AMA Policy Regarding Supervision of Medical Care Delivered by Advanced Practice Nurses in Integrated Practice"

Our AMA endorses the following principles: (1) Physicians must retain authority for patient care in any team care arrangement, e.g., integrated practice, to assure patient safety and quality of care.H-35.

(2) Medical societies should work with legislatures and licensing boards to prevent dilution of the authority of physicians to lead the health care team.

(3) Exercising independent medical judgment to select the drug of choice must continue to be the responsibility only of physicians.

(4) Physicians should recognize physician assistants and advanced practice nurses under physician leadership, as effective physician extenders and valued members of the health care team.

(5) Physicians should encourage state medical and nursing boards to explore the feasibility of working together to coordinate their regulatory initiatives and activities.

(6) Physicians must be responsible and have authority for initiating and implementing quality control programs for nonphysicians delivering medical care in integrated practices.

(BOT Rep. 23, A-96; Reaffirmation A-99; Reaffirmed: Res. 240, and Reaffirmation A-00; Reaffirmed: CMS Rep. 6, A-10; Reaffirmed: BOT Rep. 9, I-11; Reaffirmation A-12; Reaffirmed: BOT Rep. 16, A-13)

10.5, "Allied Health Professionals"

Physicians often practice in concert with optometrists, nurse anesthetists, nurse midwives, and other allied health professionals. Although physicians have overall responsibility for the quality of care that patients receive, allied health professionals have training and expertise that complements physicians'. With physicians, allied health professionals share a common commitment to patient well-being.

In light of this shared commitment, physicians' relationships with allied health professionals should be based on mutual respect and trust. It is ethically appropriate for physicians to:

(a) Help support high quality education that is complementary to medical training, including by teaching in recognized schools for allied health professionals.
(b) Work in consultation with or employ appropriately trained and credentialed allied health professionals.
(c) Delegate provision of medical services to an appropriately trained and credentialed allied health professional within the individual's scope of practice.
AMA Principles of Medical Ethics: I,V,VII
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)

H-35.989, “Physician Assistants”

1. Our AMA opposes legislation to increase public funding for programs to train physician assistants and supports a careful reevaluation of the need for public funding at the time that present legislative authorities expire.

2. A physician assistant should provide patient care services only in accord with the medical practice act and other applicable state law, and such law should provide that the physician assistant's utilization by a physician or group of physicians be approved by the medical licensing board. A licensed physician or group of physicians seeking to utilize a physician assistant should submit to the medical licensing board an application for utilization that identifies: the qualifications and experience of the physician assistant, the qualifications and experience of the supervising physician and a description of his or her practice, and a description of the manner and the health care settings in which the assistant will be utilized, and the arrangements for supervision by the responsible physician. Such an application should also specify the number of physician assistants that the physician or group of physicians plans to employ and supervise. A physician assistant should be authorized to provide patient care services only so long as the assistant is functioning under the direction and supervision of a physician or group of physicians whose application for utilization has been approved by the medical licensing board. State medical licensing boards, in their review of applications for utilization of a physician assistant, should take special care to insure that the proposed physician assistant functions not be of a type which: (a) would unreasonably expand the professional scope of practice of the supervising physician, (b) cannot be performed safely and effectively by the physician assistant, or (c) would authorize the unlicensed practice of medicine.

3. The physician assistant should function under the direction of and supervision by a duly qualified licensed physician. The physician must always maintain the ultimate responsibility to assure that high quality care is provided to every patient. In discharging that responsibility, the physician should exercise that amount of control or supervision over a physician assistant which is appropriate for the maintenance of quality medical care and in accord with existing state law and the rules and regulations of the medical licensing authority. Such supervision in most settings includes the personal presence or participation of the physician. In certain instances, such as remote practice settings, where the physician assistant may function apart from the supervising physician, such remote function (if permitted by state law) should be approved by the state medical licensing board on an individual basis. Such approval should include requirements for regular reporting to the supervising physician, frequent site visits by that physician, and arrangements for immediate communication with the supervising physician for consultation at all times. The physician assistant may serve the patients of the supervising physician in all types of health care settings, including but not limited to: physician's office, ambulatory or outpatient facility, clinic, hospital, patient's home, long-term care facility or nursing home. The state medical licensing board should determine on an individual basis the number of physician assistants that a particular physician may supervise or a group of physicians may employ.

4. While it is preferable and desirable that the physician assistant be employed by a physician or group of physicians so as to ensure appropriate physician supervision in the interests of the patient, where a physician assistant is employed by a hospital, the physician assistant must provide patient care services in accordance with the rules and procedures established by the organized medical staff for utilization of physician-employed physician assistants functioning in that institution, and under the direction and supervision of a designated physician who has been approved by the state medical licensing board to supervise that physician assistant in accordance with a specific utilization plan and who shall be directly responsible as the attending physician for the patient care services delegated to his physician assistant.

5. The AMA opposes legislation or proposed regulations authorizing physician assistants to make independent medical judgments as to the drug of choice for an individual patient.

6. In view of an announced interest by HHS in considering national legislation which would override state regulatory systems for health manpower, the AMA recommends that present Association policy supporting state prerogatives in this area be strongly reaffirmed.

7. Our AMA opposes legislation or regulation that allows physician assistant independent practice.

(BOT/CME/CMS Joint Rep., I-80; Reaffirmed: CLRPD Rep. B, I-90; Reaffirmation A-99; Reaffirmed: CME Rep. 2, A-09; Reaffirmed: BOT Rep. 9, I-11; Appended: Res. 230, I-17)

H-160.947, “Physician Assistants and Nurse Practitioners”

Our AMA will develop a plan to assist the state and local medical societies in identifying and lobbying against laws that allow advanced practice nurses to provide medical care without the supervision of a physician.

The suggested Guidelines for Physician/Physician Assistant Practice are adopted to read as follows (these guidelines shall be used in their entirety):

(1) The physician is responsible for managing the health care of patients in all settings.

(2) Health care services delivered by physicians and physician assistants must be within the scope of each practitioner's authorized practice, as defined by state law.

(3) The physician is ultimately responsible for coordinating and managing the care of patients and, with the appropriate input of the physician assistant, ensuring the quality of health care provided to patients.

(4) The physician is responsible for the supervision of the physician assistant in all settings.

(5) The role of the physician assistant in the delivery of care should be defined through mutually agreed upon guidelines that are developed by the physician and the physician assistant and based on the physician's delegatory style.

(6) The physician must be available for consultation with the physician assistant at all times, either in person or through telecommunication systems or other means.

(7) The extent of the involvement by the physician assistant in the assessment and implementation of treatment will depend on the complexity and acuity of the patient's condition and the training, experience, and preparation of the physician assistant, as adjudged by the physician.

(8) Patients should be made clearly aware at all times whether they are being cared for by a physician or a physician assistant.

(9) The physician and physician assistant together should review all delegated patient services on a regular basis, as well as the mutually agreed upon guidelines for practice.

(10) The physician is responsible for clarifying and familiarizing the physician assistant with his/her supervising methods and style of delegating patient care.

(BOT Rep. 6, A-95; Reaffirmed: Res 240 and Reaffirmation A-00; Reaffirmed: Res. 213, A-02; Modified: CLRPD Rep. 1, A-03; Reaffirmed: BOT Rep. 9, I-11; Reaffirmed: Joint CME-CMS Rep., I-12; Reaffirmed: BOT Rep. 16, A-13)

H-310.913, “Physician Extenders”

1. In academic environments, our AMA will only support payment models for non-physician practitioners that do not interfere with graduate medical training.
2. Our AMA supports the concept that procedural training is a critical portion of resident education and the augmentation of patient care by non-physician practitioners should not interfere with a resident's ability to achieve competence in the performance of required procedures.
(Res. 208, I-10; Appended: CME Rep. 8, A-13)

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