HOD Action: Council on Medical Education Report 2 adopted and the remainder of the report filed.

REPORT OF THE COUNCIL ON MEDICAL EDUCATION

CME Report 2-I-24

Subject: Updates to Recommendations for Future Directions for Medical Education

Presented by: Krystal Tomei, MD, MPH, Chair

Referred to: Reference Committee C

"Updates to Recommendations for Future Directions for Medical Education" is a self-initiated report by the Council on Medical Education.

BACKGROUND

Report Origins and Process

In July 1980, the AMA House of Delegates (HOD) authorized the establishment of six task forces to review then-current and predicted future issues within medical education. At the 1982 Annual Meeting, the Council on Medical Education released recommendations on "Future Directions for Medical Education," with the following stated purpose: "This report expresses the continual interest of the Council on Medical Education, consistent with its function within the AMA, 'to elevate medical education'."[1] These recommendations are AMA Policy H-295.995, Recommendations for Future Directions for Medical Education, and were last amended by the Council in 2017 with CME Report 1-I-17, Promoting and Reaffirming Domestic Medical School Clerkship Education (Resolution 308-I-16). Most of the current 37 recommendations retain the original language from 1982, despite more than 40 years of changes to medical education.

For this reason, the Council on Medical Education voted in favor of proposing a series of self-initiated reports to reassess and modernize the policy's recommendations, including, when relevant, consolidating some of AMA's other policies on medical education topics. The goal of this self-initiated process is to establish an updated framework for understanding the future of medical education, as well as potentially incorporating innovations and newer understandings from the last several decades of collaboration with medical education stakeholders. This first report seeks to describe a brief history of the important changes in medical education since 1982 and proposes sunsetting out-of-date recommendations within AMA Policy H-295.995. This report also describes a proposed framework for reassessing AMA Policy H-295.995, with the subcategories of 1) mission of medical education, 2) professional regulation, 3) entry into and transition through the medical education continuum, 4) medical education curricula, 5) physician as medical professional, 6) medical education systems, and 7) obligation to students and trainees. This initial report then proposes that the Council conduct future studies in following years based around each of the new framework's categories to overhaul and modernize these aspects of AMA medical education policy. Beyond deleting irrelevant and out-of-date recommendations in AMA Policy H-295.995, this initial report will continue current AMA policies on medical education without revision or reorganization—and will offer these new categories with examples of where the existing recommendations may fit in the body of future reports, with the intention of future restructuring. In future studies, if approved, policy consolidation and/or new policy recommendations will then take place under each of the adopted subcategories.

40 Years of Changes in Medical Education

A detailed historical account of all major changes in medical education across more than 40 years is outside the scope of this report; however, major examples of changes include but are not limited to the following.

Mission of medical education

Medical education's mission is to train a competent physician workforce that meets the needs of patients and populations. Though efforts by groups and individuals have been made throughout history to improve conditions for the most marginalized, a heightened awareness of equity concerns within medical education has emerged over the past few decades. In the context of the AMA, since the original 1982 Council report on the future of medical education, the Minority Affairs Consortium was created in 1992, the Commission to End Health Care Disparities began in 2004, and in 2008, the AMA officially apologized for its history of harms against Black physicians and patients.[2] The AMA's Center for Health Equity was launched in 2019, with the AMA's strategic plan to embed racial justice and advance health equity released in 2021.[3] Council on Medical Education Report 05-J-21, "Promising Practices Among Pathway Programs to Increase Diversity in Medicine"[4] discussed the harms of the 1910 Flexner Report and called for an external study focused on reimagining the future of health equity and racial justice in medical education, which was published in 2024.[5] In the greater U.S., milestones such as the 1990 Americans with Disabilities Act (ADA), the 2008 ADA Amendments Act, and the 2015 legalization of same-sex marriage via the *Obergefell v. Hodges* Supreme Court decision have also drawn attention to disability and lesbian, gay, bisexual, transgender, queer, and more (LGBTQ+) rights within medical education.[6]

In recent years, there is an unprecedented demand for health care, with increasing physician workforce shortages nationally as well as in certain underserved areas.[7] There are also current and pending shortages in specific specialties, such as urology.[8] Many of these shortages may be attributed to maldistribution, rather than purely insufficient numbers of physicians nationwide, with certain areas remaining underserved, particularly rural areas, with medical education playing a major role in influencing physicians to meet these needs.[9] The transition toward competency-based medical education (CBME) is one of the most pivotal shifts in medical education in recent years[10] and one of AMA's ChangeMedEd 2023 areas of strategic focus, alongside equity, diversity, and belonging; precision education; and transitions across the continuum.[11]

Professional regulation

Medical education maintains commitment to the concept that the regulation of the medical profession should be guided by physicians. A 2015 memorandum of understanding between the Accreditation Council for Graduate Medical Education (ACGME), American Osteopathic Association, and American Association of Colleges of Osteopathic Medicine began a five-year transition to single U.S. graduate medical education (GME) accreditation, which finalized in 2020,[12] though some express concerns.[13] AMA policy currently supports work toward a single licensure exam (Single Licensing Exam Series for Osteopathic and Allopathic Medical Students D-275.947), and inequities between Doctors of Osteopathic Medicine (DOs) and Doctors of Medicine (MDs) continue to be addressed.[14]

Significant overall shifts in how standardized assessments are designed and discussed have also taken place since the 1980s. This includes the notion of competence as actual competencies linked

to patient outcomes rather than personality traits, an understanding that did not develop until the late 1990s and early 2000s, with awareness of assessor bias and the limitations of assessments emerging in scholarly literature even later.[15] In 2021, the United States Medical Licensing Examination (USMLE) Step 2 Clinical Skills (CS) was permanently discontinued after a COVID-19 related 2020 suspension.[16] Similarly, the Comprehensive Osteopathic Medical Licensing Examination of the United States (COMLEX-USA) Level 2-PE was suspended in 2021 and formally discontinued in 2022.[61] Also in 2022, the USMLE Step 1 exam and COMLEX-USA Level 1 exam were converted from numeric to pass-fail.[17, 62]

Entry into and transition through the medical education continuum

Application and selection processes have also changed over time. In 1995, the Association of American Medical Colleges (AAMC) developed the Electronic Residency Application Service (ERAS), replacing cumbersome paper mail residency applications with newer technology—first floppy disks, followed by web-based services.[18] In more recent years, specialties have considered and tested alternatives to ERAS, such as the obstetrics and gynecology (OB/GYN) specialty's shift to the Residency Centralized Application Service in 2024.[19] This new platform will still work in conjunction with the National Resident Matching Program (NRMP) for the Match. Although the NRMP was established in 1952,[20] significant changes have also taken place over the years to modernize infrastructure and shift strategic priorities in response to modern needs.[21] The NRMP formalized its Specialty Matching Service and conducted its first fellowship Match in 1984.[22] A single Match for DOs and MDs began in 2020.[6]

The COVID-19 pandemic, declared officially in 2020, sparked both a major crisis within medical education and devastation for many within society at large, prompting opportunities for transformations of existing systems[23] in both education and patient care.[24] AAMC now recommends virtual interviewing for all residency and fellowship programs.[25] On the heels of COVID-19 related upheaval, the Coalition for Physician Accountability commissioned an independent body to review the UME-to-GME transition and provide recommendations. The Undergraduate Medical Education to Graduate Medical Education Review Committee (UGRC) released a report with 34 recommendations in August 2021.[26]

For international medical graduates, the Educational Commission for Foreign Medical Graduates (ECFMG) established the Foundation for Advancement of International Medical Education and Research (FAIMER) in 2000,[27] launched electronic verification of medical credentials in 2012,[28] developed certification Pathways in 2020 following the suspension of USMLE Step 2,[29] and in 2023, ECFMG and FAIMER became divisions of a private nonprofit organization, Intealth.[29] In 2024, the Federation of State Medical Boards (FSMB), Intealth, and the ACGME established an Advisory Commission on Alternate Licensing Models to "provide guidance on alternative pathways for state licensure of physicians who have completed training and/or practiced outside of the United States," with work in progress at the time of this writing.[30]

Medical education curricula

A vast number of technological changes have occurred since 1982, including but not limited to the advent of widely available internet access in the 1990s[31] in addition to more specific technological shifts in medical education over time.[32] Virtual education is now prominent.[33] More recently, the increasing attention to generative artificial intelligence or augmented intelligence (AI) prompted the AMA to release "Principles for Augmented Intelligence Development, Deployment, and Use" in November 2023.[34] AI technology and its opportunities and challenges are increasingly woven into the field of medical education.[35]

From 2013-2022, the AMA's Accelerating Change in Medical Education Consortium[36] made $30 million in grants to 32 medical schools to jumpstart curricular and process changes and disseminate ideas,[37] and in 2019, AMA launched the Reimagining Residency initiative to support innovations to transform residency training.[38] The consortium became ChangeMedEd in 2023, and lessons from ChangeMedEd are informing ideas on future directions in medical education as intended. Curricular innovations include health systems science,[39] the Master Adaptive Learner model,[40] and a renewed emphasis on equity and social determinants of health.[41]

Physician as medical professional

Due in part to the rapid growth of managed care in health insurance in the late 1980s and early 1990s, a much larger proportion of physicians began seeking board certification.[42] Rapid changes in medicine and the exponential growth of medical knowledge also caused shifts in patient and payer concerns about physician knowledge.[43] In 1990, internal medicine board certification became time-limited rather than one-time, and in 2002, all member boards of the American Board of Medical Specialties agreed on recertification requirements and evaluation of performance in practice.[42] These changes led to continuous assessment programs called maintenance of certification (MOC)[43] in the early 2000s, which offered both benefits and challenges, and translated to varying options for continuing board certification depending on specialty, such as a longitudinal knowledge assessment pathway for the American Board of Internal Medicine (ABIM) in 2022.[43]

With regard to physician lifelong learning, the Accreditation Council for Continuing Medical Education was still new when the 1982 report was written, having been established in 1981, and has evolved over time.[44] AMA's own Physician Recognition Award (PRA) Credit System also shifted over time, including official booklet updates in 2017 and in-progress changes since then.[45] Many factors related to lifelong learning have also emerged into greater awareness, such as ageism and principles to guide physician competence assessment at any age[46] and substance use disorder destigmatization and interventions.[47]

Medical education systems

The overall role of the physician and the practice of medicine in U.S. society has shifted. There has been a shift away from independent practice, influenced by economic, administrative, and regulatory burdens.[48] Due to the increasing complexity of health systems, in 1999, systems-based practice was introduced as one of the core competencies[49] endorsed by the ACGME and the ABMS, with Milestones introduced in 2013 as a developmental framework related to competencies and harmonized across specialties in 2017. There have been other updates since then.[49] Challenges continue to emerge in the clinical learning environment, requiring new approaches.[40] There are increasing concerns about the impact of corporate interests and private equity, as discussed in Council on Medical Education Reports 01-I-22, "The Impact of Private Equity on Medical Training,"[50] and 01-I-20, "Graduate Medical Education and the Corporate Practice of Medicine."[51] Other systems factors also influence medical education, such as high demand for clinical placements,[52] physician workforce disparities,[53] and scope of practice concerns, the latter of which led to the formation of the AMA's Scope of Practice Partnership in 2006.[54]

Obligation to students and trainees

Since 1982, there has been increased attention to the needs of students and trainees, in a variety of forms. Student well-being is now better researched, and a variety of interventions have been tested and implemented on an ongoing basis.[55] Resident working conditions and duty hours have become

major issues in GME, particularly after the Libby Zion case in 1984[56] and adoption of ACGME duty hour standards.[57] In 2011, the AMA released the Residents and Fellows' Bill of Rights H-31.912, last updated in 2023, and there is increasing awareness of the need to address growing stressors and burnout within medical education, both for learners[58] and faculty.[59]

Research is ongoing on how other aspects of the medical education field have shifted over time and how these changes may impact learners and public health.[60]

Proposal for a New Medical Education Policy Framework

Given the substantial evolution in medical education over the last 40+ years, the Council on Medical Education proposes, over a series of future reports, to systematically re-evaluate Policy H-295.995 recommendations and other relevant AMA medical education policy to: a) reframe existing policies to match the current context, b) consolidate duplicate or overlapping policies, c) remove outdated policies, and d) propose new policies to address identified gaps. The proposed framework for this project is discussed below.

DISCUSSION

In the Council's original 1982 report, medical education topics were divided into the following 10 categories: 1) generalism and specialism, 2) preparation for and admission to medical school, 3) medical schools and undergraduate medical education, 4) evaluation, 5) the transition from undergraduate to graduate medical education, 6) specialism, graduate medical education, and specialty boards, 7) licensure for the practice of medicine, 8) continuing medical education, 9) graduates of foreign medical schools, and 10) the AMA and medical education. To modernize this policy, the Council on Medical Education recommends establishing a new framework with the following seven categories: 1) mission of medical education, 2) professional regulation, 3) entry into and transition through the medical education continuum, 4) medical education curricula, 5) physician as medical professional, 6) medical education systems, and 7) obligations to students and trainees. After receiving input from the House on this report, the Council intends to develop future reports based on a framework as adopted by the House of Delegates.

The Council on Medical Education also recommends sunsetting four out-of-date subsections of H-295.995, seen below.

RELEVANT AMA POLICY

The current, full text of Recommendations for Future Directions for Medical Education H-295.995 is listed in the Appendix A of this report.

SUMMARY AND RECOMMENDATIONS

Substantial changes have taken place in medical education since 1982, and AMA Policy H-295.995, "Recommendations for Future Directions for Medical Education," has not been comprehensively reviewed in over 40 years. The Council on Medical Education proposes a future series of self-initiated reports to modernize AMA medical education policy and consolidate relevant medical education policies.

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

That our American Medical Association (AMA):

1. Study the restructuring of AMA Policy H-295.995, "Recommendations for Future Directions for Medical Education" in a series of seven future reports based on the topics of 1) mission of medical education, 2) professional regulation, 3) entry into and transition through the medical education continuum, 4) medical education curricula, 5) physician as medical professional, 6) medical education systems, and 7) obligations to students and trainees, to consolidate existing AMA policies in these areas where appropriate and to recommend new language for the future of medical education. (Directive to Take Action)

2. Policy H-295.995, "Recommendations for Future Directions for Medical Education," be amended by deletion of items 19, 20, 31 and 33 and appropriately renumbered to read as follows (Modify Current HOD Policy):

(19) ~~The first year of postdoctoral medical education for all graduates should consist of a broad year of general training. (a) For physicians entering residencies in internal medicine, pediatrics, and general surgery, postdoctoral medical education should include at least four months of training in a specialty or specialties other than the one in which the resident has been appointed. (A residency in family practice provides a broad education in medicine because it includes training in several fields.) (b) For physicians entering residencies in specialties other than internal medicine, pediatrics, general surgery, and family practice, the first postdoctoral year of medical education should be devoted to one of the four above-named specialties or to a program following the general requirements of a transitional year stipulated in the "General Requirements" section of the "Essentials of Accredited Residencies." (c) A program for the transitional year should be planned, designed, administered, conducted, and evaluated as an entity by the sponsoring institution rather than one or more departments. Responsibility for the executive direction of the program should be assigned to one physician whose responsibility is the administration of the program. Educational programs for a transitional year should be subjected to thorough surveillance by the appropriate accrediting body as a means of assuring that the content, conduct, and internal evaluation of the educational program conform to national standards. The impact of the transitional year should not be deleterious to the educational programs of the specialty disciplines.~~

(20) ~~The ACGME, individual specialty boards, and respective residency review committees should improve communication with directors of residency programs because of their shared responsibility for programs in graduate medical education.~~

(31) ~~The Educational Commission for Foreign Medical Graduates should be encouraged to study the feasibility of including in its procedures for certification of graduates of foreign medical schools a period of observation adequate for the evaluation of clinical skills and the application of knowledge to clinical problems.~~

(33) ~~The AMA, when appropriate, supports the use of selected consultants from the public and from the professions for consideration of special issues related to medical education.~~

Fiscal note: $7,000

APPENDIX A: RELEVANT AMA POLICY

Recommendations for Future Directions for Medical Education H-295.995
Our AMA supports the following recommendations relating to the future directions for medical education:
(1) The medical profession and those responsible for medical education should strengthen the general or broad components of both undergraduate and graduate medical education. All medical students and resident physicians should have general knowledge of the whole field of medicine regardless of their projected choice of specialty.
(2) Schools of medicine should accept the principle and should state in their requirements for admission that a broad cultural education in the arts, humanities, and social sciences, as well as in the biological and physical sciences, is desirable.
(3) Medical schools should make their goals and objectives known to prospective students and premedical counselors in order that applicants may apply to medical schools whose programs are most in accord with their career goals.
(4) Medical schools should state explicitly in publications their admission requirements and the methods they employ in the selection of students.
(5) Medical schools should require their admissions committees to make every effort to determine that the students admitted possess integrity as well as the ability to acquire the knowledge and skills required of a physician.
(6) Although the results of standardized admission testing may be an important predictor of the ability of students to complete courses in the preclinical sciences successfully, medical schools should utilize such tests as only one of several criteria for the selection of students. Continuing review of admission tests is encouraged because the subject content of such examinations has an influence on premedical education and counseling.
(7) Medical schools should improve their liaison with college counselors so that potential medical students can be given early and effective advice. The resources of regional and national organizations can be useful in developing this communication.
(8) Medical schools are chartered for the unique purpose of educating students to become physicians and should not assume obligations that would significantly compromise this purpose.
(9) Medical schools should inform the public that, although they have a unique capability to identify the changing medical needs of society and to propose responses to them, they are only one of the elements of society that may be involved in responding. Medical schools should continue to identify social problems related to health and should continue to recommend solutions.
(10) Medical school faculties should continue to exercise prudent judgment in adjusting educational programs in response to social change and societal needs.
(11) Faculties should continue to evaluate curricula periodically as a means of insuring that graduates will have the capability to recognize the diverse nature of disease, and the potential to provide preventive and comprehensive medical care. Medical schools, within the framework of their respective institutional goals and regardless of the organizational structure of the faculty, should provide a broad general education in both basic sciences and the art and science of clinical medicine.
(12) The curriculum of a medical school should be designed to provide students with experience in clinical medicine ranging from primary to tertiary care in a variety of inpatient and outpatient settings, such as university hospitals, community hospitals, and other health care facilities. Medical schools should establish standards and apply them to all components of the clinical educational program regardless of where they are conducted. Regular evaluation of the quality of each experience and its contribution to the total program should be conducted.
(13) Faculties of medical schools have the responsibility to evaluate the cognitive abilities of their students. Extramural examinations may be used for this purpose, but never as the sole criterion for promotion or graduation of a student.

(14) As part of the responsibility for granting the MD degree, faculties of medical schools have the obligation to evaluate as thoroughly as possible the non-cognitive abilities of their medical students.
(15) Medical schools and residency programs should continue to recognize that the instruction provided by volunteer and part-time members of the faculty and the use of facilities in which they practice make important contributions to the education of medical students and resident physicians. Development of means by which the volunteer and part-time faculty can express their professional viewpoints regarding the educational environment and curriculum should be encouraged.
(16) Each medical school should establish, or review already established, criteria for the initial appointment, continuation of appointment, and promotion of all categories of faculty. Regular evaluation of the contribution of all faculty members should be conducted in accordance with institutional policy and practice.
(17a) Faculties of medical schools should reevaluate the current elements of their fourth or final year with the intent of increasing the breadth of clinical experience through a more formal structure and improved faculty counseling. An appropriate number of electives or selected options should be included. (17b) Counseling of medical students by faculty and others should be directed toward increasing the breadth of clinical experience. Students should be encouraged to choose experience in disciplines that will not be an integral part of their projected graduate medical education.
(18) Directors of residency programs should not permit medical students to make commitments to a residency program prior to the final year of medical school.
(19) The first year of postdoctoral medical education for all graduates should consist of a broad year of general training. (a) For physicians entering residencies in internal medicine, pediatrics, and general surgery, postdoctoral medical education should include at least four months of training in a specialty or specialties other than the one in which the resident has been appointed. (A residency in family practice provides a broad education in medicine because it includes training in several fields.) (b) For physicians entering residencies in specialties other than internal medicine, pediatrics, general surgery, and family practice, the first postdoctoral year of medical education should be devoted to one of the four above-named specialties or to a program following the general requirements of a transitional year stipulated in the "General Requirements" section of the "Essentials of Accredited Residencies." (c) A program for the transitional year should be planned, designed, administered, conducted, and evaluated as an entity by the sponsoring institution rather than one or more departments. Responsibility for the executive direction of the program should be assigned to one physician whose responsibility is the administration of the program. Educational programs for a transitional year should be subjected to thorough surveillance by the appropriate accrediting body as a means of assuring that the content, conduct, and internal evaluation of the educational program conform to national standards. The impact of the transitional year should not be deleterious to the educational programs of the specialty disciplines.
(20) The ACGME, individual specialty boards, and respective residency review committees should improve communication with directors of residency programs because of their shared responsibility for programs in graduate medical education.
(21) Specialty boards should be aware of and concerned with the impact that the requirements for certification and the content of the examination have upon the content and structure of graduate medical education. Requirements for certification should not be so specific that they inhibit program directors from exercising judgment and flexibility in the design and operation of their programs.
(22) An essential goal of a specialty board should be to determine that the standards that it has set for certification continue to assure that successful candidates possess the knowledge, skills, and the commitment to upgrade continually the quality of medical care.
(23) Specialty boards should endeavor to develop a consensus concerning the significance of certification by specialty and publicize it so that the purposes and limitations of certification can be clearly understood by the profession and the public.

(24) The importance of certification by specialty boards requires that communication be improved between the specialty boards and the medical profession as a whole, particularly between the boards and their sponsoring, nominating, or constituent organizations and also between the boards and their diplomates.
(25) Specialty boards should consider having members of the public participate in appropriate board activities.
(26) Specialty boards should consider having physicians and other professionals from related disciplines participate in board activities.
(27) The AMA recommends to state licensing authorities that they require individual applicants, to be eligible to be licensed to practice medicine, to possess the degree of Doctor of Medicine or its equivalent from a school or program that meets the standards of the LCME or accredited by the American Osteopathic Association, or to demonstrate as individuals, comparable academic and personal achievements. All applicants for full and unrestricted licensure should provide evidence of the satisfactory completion of at least one year of an accredited program of graduate medical education in the US. Satisfactory completion should be based upon an assessment of the applicant's knowledge, problem-solving ability, and clinical skills in the general field of medicine. The AMA recommends to legislatures and governmental regulatory authorities that they not impose requirements for licensure that are so specific that they restrict the responsibility of medical educators to determine the content of undergraduate and graduate medical education.
(28) The medical profession should continue to encourage participation in continuing medical education related to the physician's professional needs and activities. Efforts to evaluate the effectiveness of such education should be continued.
(29) The medical profession and the public should recognize the difficulties related to an objective and valid assessment of clinical performance. Research efforts to improve existing methods of evaluation and to develop new methods having an acceptable degree of reliability and validity should be supported.
(30) Methods currently being used to evaluate the readiness of graduates of foreign medical schools to enter accredited programs in graduate medical education in this country should be critically reviewed and modified as necessary. No graduate of any medical school should be admitted to or continued in a residency program if his or her participation can reasonably be expected to affect adversely the quality of patient care or to jeopardize the quality of the educational experiences of other residents or of students in educational programs within the hospital.
(31) The Educational Commission for Foreign Medical Graduates should be encouraged to study the feasibility of including in its procedures for certification of graduates of foreign medical schools a period of observation adequate for the evaluation of clinical skills and the application of knowledge to clinical problems.
(32) The AMA, in cooperation with others, supports continued efforts to review and define standards for medical education at all levels. The AMA supports continued participation in the evaluation and accreditation of medical education at all levels.
(33) The AMA, when appropriate, supports the use of selected consultants from the public and from the professions for consideration of special issues related to medical education.
(34) The AMA encourages entities that profile physicians to provide them with feedback on their performance and with access to education to assist them in meeting norms of practice; and supports the creation of experiences across the continuum of medical education designed to teach about the process of physician profiling and about the principles of utilization review/quality assurance.
(35) Our AMA encourages the accrediting bodies for MD- and DO-granting medical schools to review, on an ongoing basis, their accreditation standards to assure that they protect the quality and integrity of medical education in the context of the emergence of new models of medical school organization and governance.

(36) Our AMA will strongly advocate for the rights of medical students, residents, and fellows to have physician-led (MD or DO as defined by the AMA) clinical training, supervision, and evaluation while recognizing the contribution of non-physicians to medical education.
(37) Our AMA will publicize to medical students, residents, and fellows their rights, as per Liaison Committee on Medical Education and Accreditation Council for Graduate Medical Education guidelines, to physician-led education and a means to report violations without fear of retaliation.

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