

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

REPORT 1 OF THE COUNCIL ON MEDICAL EDUCATION (November 2020)

An Update on Continuing Board Certification

(Resolutions 301-A-19 and 308-A-19)

(Reference Committee C)

EXECUTIVE SUMMARY

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

In early 2018, the Continuing Board Certification: Vision for the Future Commission was established by the ABMS and charged with reviewing continuing certification within the current context of the medical profession. Later that year, the Council on Medical Education provided comments to strengthen the draft recommendations of the Commission. In February 2019, the Commission completed its final report based on research, testimony, and public feedback from stakeholders throughout the member boards and health care communities. The Commission’s report contained 14 recommendations intended to modernize CBC so that it is meaningful, contemporary, and a relevant professional development activity for diplomates who are striving to be up to date in their specialty.¹ The ABMS and ABMS member boards, in collaboration with professional organizations and other stakeholders, agreed, prioritized these recommendations, and developed strategies to implement them. A summary of these strategies is provided in this report.

This report also highlights the following initiatives that are underway to improve CBC:

- The ABMS member boards have signaled their intent to offer alternatives to the high-stakes, 10-year examination. Three-fourths of the boards (75 percent) have completed or are administering longitudinal assessment pilots that combine adult learning principles with state-of-the-art technology, enabling delivery of assessments that promote learning and are less stressful. Appendix B in this report summarizes these new models.
- The ABMS member boards have broadened the range of acceptable activities that meet the Improvement in Medical Practice (IMP) requirements, including those offered at the physician’s institution and/or individual practices, to address physician concerns about the relevance, cost, and burden associated with fulfilling the IMP requirements. Appendix B includes a summary of these initiatives.
- Studies published during the last year describe how new assessment models and IMP activities have resulted in improved quality and patient care and physician satisfaction. Appendix C provides a bibliography of recent studies and editorials published in peer-reviewed journals.

The Council on Medical Education is committed to ensuring that CBC supports physicians’ ongoing learning and practice improvement and can assure the public that physicians are providing high-quality patient care. The Council will remain actively engaged in the implementation of the Commission’s recommendations and continue to identify and suggest improvements to CBC programs.

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

REPORT OF THE COUNCIL ON MEDICAL EDUCATION

CME Report 1, November 2020

Subject: An Update on Continuing Board Certification
(Resolutions 301-A-19 and 308-A-19)

Presented by: Liana Puscas, MD, MHS, Chair

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

1 Resolution 301-A-19, “American Board of Medical Specialties Advertising,” introduced by
2 Virginia, the American Association of Clinical Urologists, Louisiana, and Mississippi and referred
3 by the American Medical Association (AMA) House of Delegates (HOD), asks the AMA to
4 oppose the use of any physician fees, dues, etc., for any advertising by the American Board of
5 Medical Specialties or any of their component boards to the general public.

6
7 Resolution 308-A-19, “Maintenance of Certification Moratorium,” introduced by New York and
8 referred by the AMA HOD, asks the AMA to:

- 9
10 1. Call for an immediate end to the high stakes examination components as well as an end to
11 the Quality Initiative (QI)/Practice Improvement (PI) components of Maintenance of
12 Certification (MOC).
13 2. Call for retention of continuing medical education (CME) and professionalism components
14 (how physicians carry out their responsibilities safely and ethically) of MOC only.
15 3. Petition the American Board of Medical Specialties for the restoration of certification
16 status for all diplomates who have lost certification status solely because they have not
17 complied with MOC requirements.

18
19 Policy D-275.954(1), “Continuing Board Certification,” asks that the AMA continue to monitor the
20 evolution of Continuing Board Certification (CBC), continue its active engagement in discussions
21 regarding their implementation, encourage specialty boards to investigate and/or establish
22 alternative approaches for CBC, and prepare a yearly report to the HOD regarding the CBC
23 process.” It should be noted that “CBC” is a new term for the MOC Program being used by the
24 American Board of Medical Specialties (ABMS) Board of Directors and some ABMS member
25 boards (other member boards are still referring to the program as MOC). Policy D-275.954 was
26 revised in 2019 to be consistent with this change.

27
28 This report is in response to this policy and the two referenced resolutions noted above.

29
30 **BACKGROUND**

31
32 During the 2019 Annual Meeting, testimony before Reference Committee C was mixed regarding
33 Resolution 301-A-19. Testimony noted that hospitals, insurance companies, malpractice insurers,

1 and others often require board certification for a physician to practice medicine and that physicians
2 are essentially required to maintain active certification and pay yearly fees to their specialty boards.
3 Testimony also noted that, although the AMA maintains robust policy on CBC, including policy
4 related to the cost of development and administration of the CBC components and transparency of
5 finances of the ABMS and the ABMS member boards, this policy does not attempt to exert control
6 over ABMS policies and procedures. In addition, this resolution is not consistent with AMA policy
7 that supports informing the public about the value of board certification. Although the reference
8 committee recommended that Resolution 301 not be adopted, the HOD voted to refer this
9 resolution for further study.

10
11 Reference Committee C also heard mixed testimony regarding Resolution 308-A-19. It was stated
12 that continuing certification has become another element that contributes to stress and burnout, and
13 that many physicians find elements of continuous certification/MOC problematic. So, the Council
14 on Medical Education continues to study the issues raised in this resolution. In addition, the ABMS
15 convened a Stakeholders Council to address the recommendations of the recently released report of
16 the Continuing Board Certification: Vision for the Future Commission that addresses some of these
17 concerns. The AMA also has representation on the ABMS Continuing Certification Committee,
18 which monitors and approves alternative models within the existing components of continuing
19 certification. The committee is considering how to integrate the assessment of standards into
20 everyday practice activities. The reference committee felt that a thorough review and analysis of
21 the issues raised in this item was needed and recommended that Resolution 308 be referred with a
22 report back to the HOD at the 2020 Annual Meeting.

23 24 CONTINUING BOARD CERTIFICATION: VISION FOR THE FUTURE COMMISSION

25
26 In early 2018, the Continuing Board Certification: Vision for the Future Commission
27 (<https://visioninitiative.org/>), an independent body of 27 individuals representing diverse
28 stakeholders, was established by the ABMS and charged with reviewing continuing certification
29 within the current context of the medical profession. Later that year, the AMA Council on Medical
30 Education provided comments to strengthen the draft recommendations of the Commission. In
31 February 2019, the Commission completed its final report, which was the culmination of research,
32 testimony, and public feedback from stakeholders throughout the member boards and health care
33 communities. As noted in CME Report 2-A-19, the Commission's report contained 14
34 recommendations intended to modernize CBC so that it is meaningful, contemporary, and a
35 relevant professional development activity for diplomates who are striving to be up to date in their
36 specialty.¹ The ABMS and ABMS member boards, in collaboration with professional organizations
37 and other stakeholders, agreed, prioritized these recommendations, and developed the following
38 strategies as first steps to implement them:

- 39
40
- 41 • Creation of the “Achieving the Vision for Continuing Board Certification” Oversight
42 Committee, charged with directing the implementation strategy.
 - 43 • Establishment of the following task forces to implement key recommendations outlined by the
44 Commission in its final report.
 - 45 • Standards Task Force – will obtain appropriate input from stakeholders including
46 practicing physicians to develop new, integrated continuing certification standards,
47 consistent with the Commission's recommendations, which will be implemented by the
48 ABMS member boards.
 - 49 • Advancing Practice Task Force – will engage specialty societies, the Council on Medical
50 Education, continuing professional development communities, and other expert

- 1 stakeholders to identify practice environment changes necessary to support learning and
2 improvement activities that produce data-driven advances in physicians' clinical practices.
- 3 • Information and Data Sharing Task Force – will make recommendations regarding the
4 processes and infrastructure necessary to facilitate data and information sharing between
5 ABMS member boards and key stakeholders in order to support development of future
6 educational and assessment programs and activities.
 - 7 • Professionalism Task Force – will address the aspirational Commission recommendation
8 calling for the ABMS and the ABMS member boards to develop approaches to evaluate
9 professionalism and professional standing and will work with other stakeholder
10 organizations to explore approaches to future assessment of professionalism and enhance
11 consistency in judgments regarding professional standards.
 - 12 • Remediation Task Force – will define aspects and suggest pathways for remediation of
13 gaps prior to certification loss as well as pathways for regaining eligibility after loss of
14 certification.
- 15
 - 16 • Agreement of all 24 ABMS member boards to commit to longitudinal or other formative
17 assessment strategies and offer alternatives to the highly secure, point-in-time examinations of
18 knowledge.
 - 19
 - 20 • Commitment by the ABMS to develop new, integrated standards for continuing certification
21 programs by 2020. The standards will address the Commission recommendations for flexibility
22 in knowledge assessment and advancing practice, feedback to diplomates, and consistency.

23
24 Additional information about the progress of the ABMS and member boards is available at:
25 vision.abms.org.

26 27 CONTINUING BOARD CERTIFICATION: AN UPDATE

28
29 The AMA Council on Medical Education and the HOD have carried out extensive and sustained
30 work in developing policy on CBC (Appendix A), including working with the ABMS and the
31 American Osteopathic Association (AOA) to provide physician feedback to improve the CBC
32 processes, informing our members about progress on CBC through annual reports to the HOD, and
33 developing strategies to address the concerns about the CBC processes raised by physicians. The
34 Council has prepared reports covering CBC (formerly known as Maintenance of Certification and
35 Osteopathic Continuous Certification) for the past 11 years.¹⁻¹¹ During the last year, Council
36 members, AMA trustees, and AMA staff have participated in the following meetings with the
37 ABMS and its member boards:

- 38
- 39 • ABMS Committee on Continuing Certification
- 40 • ABMS Stakeholder Council
- 41 • ABMS 2019 Conference
- 42 • ABMS Board of Directors Meeting
- 43 • Academic Physicians Section November 2019 Meeting
- 44 • AMA/ABMS March 2020 Joint Meeting

45 46 *ABMS Committee on Continuing Certification*

47
48 The ABMS Committee on Continuing Certification (3C) is charged with overseeing the review
49 process to CBC programs as well as policies and procedures. During 2018 and 2019, the 3C
50 approved substantive program changes that have been implemented and announced new active

1 pilot programs intended to enhance relevance to practice and improve diplomate satisfaction, while
2 maintaining the rigor of educational, assessment, and improvement components. The 3C and the
3 individual member boards continue to receive input from experts who research physician
4 competence and administer assessment programs to discuss the future development of continuing
5 professional development programs as well as security considerations, performance standards, and
6 psychometric characteristics of longitudinal assessment programs. Additionally, the 3C is currently
7 addressing issues of importance to multiple certificate holders, holders of co-sponsored certificates,
8 and physicians trained through non-Accreditation Council for Graduate Medical Education-
9 approved pathways.

10 *ABMS Stakeholder Council*

11 Formed in 2018, the Stakeholder Council is an advisory body representing the interests of active
12 diplomate physicians, patients, and the public. It was established to ensure that the decisions of the
13 ABMS Board of Directors are grounded in an understanding of the perspectives, concerns, and
14 interests of the multiple constituents impacted by the ABMS's work. The Stakeholder Council also
15 provides guidance to the Achieving the Vision Oversight Commission as it rolls out the Achieving
16 the Vision implementation plan.
17

18
19
20 At its May 2019 meeting, the Stakeholder Council discussed how the ABMS and its member
21 boards can effectively communicate the evolving process of continuing certification that better
22 balances learning and assessment, in enhancing its value to physicians while meeting the needs of
23 the public for a meaningful credential. Issues identified as an important part of the Council's
24 charge included sharing research, promoting best practices for new/emerging technologies,
25 developing novel assessment techniques, aligning continuing certification activities with national
26 reporting and licensure requirements, strengthening relationships between boards and specialty
27 societies, and engaging in patient advocacy.
28

29 *ABMS Accountability and Resolution Committee*

30
31 In 2018, the ABMS also established the Accountability and Resolution Committee (ARC). The
32 ARC, which is comprised of members of the ABMS Board of Directors on a rotating basis,
33 including the Board's public members, is authorized by the ABMS Board to address and make
34 recommendations regarding complaint resolution and allegations of noncompliance by the member
35 boards, when issues have not been resolved through other mechanisms. The ARC is intended to
36 collectively empower the larger ABMS member board community and promote shared
37 accountability and responsibility.
38

39 *Academic Physicians Section November 2019 Meeting*

40
41 The November 2019 Academic Physicians Section featured a CME session, "Update on ABMS
42 Continuing Board Certification," that was cosponsored by the Council on Medical Education and
43 Young Physicians Section. The panel discussed the new paradigm of CBC, which has replaced
44 MOC, the advantages of participation in CBC, and the current position of the AMA and its
45 contributions to improvements in MOC/CBC, based on Council on Medical Education reports and
46 AMA policy.
47

48 *AMA/ABMS March 2020 Joint Meeting*

49
50 On March 16, the Council on Medical Education facilitated a joint conference call with the ABMS
51 and representatives from some of the ABMS member boards to hear an update on the work of the

1 ABMS Standards Task Force formed to develop new continuing certification standards consistent
2 with the recommendations of the Vision for the Future Commission. The draft revised Standards
3 for the ABMS Program for Continuing Board Certification were also presented to the Council. The
4 ABMS plans to circulate the revised standards for public comment in late summer. The Council
5 also plans to schedule an additional meeting with the ABMS and the ABMS member boards in
6 2020 to discuss the work of the other four task forces that are implementing the charges of the
7 Commission.

8
9 *Update on New Continuing Medical Education Models*

10
11 The ABMS Continuing Certification Directory™ ([https://www.abms.org/initiatives/abms-](https://www.abms.org/initiatives/abms-continuing-certification-directory/)
12 [continuing-certification-directory/](https://www.abms.org/initiatives/abms-continuing-certification-directory/)) continues to offer physicians access to a comprehensive,
13 centralized, web-based repository of CME activities that have been approved for CBC credit by the
14 ABMS member boards. Users can search practice-relevant activities that have been approved by
15 one or more member boards. During the past year, the directory has increased its inventory and
16 now indexes more than 1,000 open-access accredited CME activities from more than 60 CME
17 providers, including Opioid Prescriber Education Programs, to help diplomates from across
18 specialties meet CBC requirements for Lifelong Learning and Self-Assessment (Part II) and
19 Improvement in Medical Practice (Part IV). Many of the member boards collaborate with specialty
20 societies to develop continuing certification and/or CME activities through which physicians can
21 satisfy CBC requirements.

22
23 The following types of activities are currently included in the directory: internet enduring activities,
24 journal-based CME, internet point of care, live activities, and performance improvement CME. All
25 CME activities are qualified to award credit(s) from one or more of the CME credit systems: *AMA*
26 *PRA Category 1 Credit*™, American Academy of Family Physicians (AAFP) Prescribed Credit,
27 American College of Obstetricians and Gynecologists (ACOG) Cognates, and AOA Category 1-A.

28
29 Many member boards also employ technology to personalize assessments that promote greater self-
30 awareness and support participation in CME. For example, the American Board of Anesthesiology
31 (ABA) is now able to link assessment results from its MOCA Minute® program with CME
32 opportunities. More than half (53 percent) of MOCA Minute® questions can be linked to at least
33 one CME activity, and more than 110 accredited CME providers have been able to link a combined
34 total of 3,261 activities to the MOCA content outline.¹² This technology facilitates identification of
35 knowledge gaps and targets learning strategies.

36
37 *Update on Innovative Knowledge Assessments being Offered as an Option to the Secure, High-*
38 *Stakes Examination*

39
40 The ABMS member boards have signaled their intent to offer alternatives to the high-stakes, 10-
41 year examination. Twenty-three ABMS member boards (95.8 percent) have moved away from the
42 secure, high-stakes exam, and more than 90 percent have completed, or will soon be launching
43 assessment pilots that combine adult learning principles with state-of-the-art technology, enabling
44 delivery of assessments that promote learning and are less stressful (Appendix B).

45
46 Fourteen member boards have implemented and/or are piloting a longitudinal assessment approach
47 which involves administering shorter assessments of specific content, such as medical knowledge,
48 repeatedly over a period of time. Seven of these boards are using CertLink® a technology platform
49 developed by the ABMS to support the boards in delivering more frequent, practice-relevant, and
50 user-friendly competence assessments to physicians ([https://www.abms.org/initiatives/certlink-](https://www.abms.org/initiatives/certlink-platform-and-pilot-programs/)
51 [platform-and-pilot-programs/](https://www.abms.org/initiatives/certlink-platform-and-pilot-programs/)). This platform provides technology to enable boards to create

1 assessments focused on practice-relevant content; offers convenient access on desktop or mobile
2 device (depending on each board's program); provides immediate, focused feedback and guidance
3 to resources for further study; and provides a personalized dashboard that displays participating
4 physicians' areas of strength and weakness. In a recent ABMS survey, 95 percent of physicians
5 using CertLink[®] indicated a reduction in test anxiety, 98 percent preferred CertLink[®] and
6 longitudinal assessment over the every-10-year exam, and most considered CertLink[®] as a feasible
7 method for keeping up-to-date with developments and an adequate assessment of fundamental
8 knowledge used in everyday practice.¹³ To date, more than 10,000 physicians are active on
9 CertLink[®] and have answered more than 800,000 questions across the seven member boards.

10
11 The transition to new, formative approaches to the assessment of knowledge and clinical judgment
12 has created unique opportunities for ABMS member boards and specialty societies to work
13 together to design the future of continuing board certification. The American Board of Internal
14 Medicine (ABIM), American Board of Obstetrics and Gynecology (ABOG), and American Board
15 of Plastic Surgery are adopting these new approaches.¹⁴

16
17 The ABIM also announced that it anticipates launching a longitudinal assessment option in 2022 in
18 as many specialties as possible.¹⁵ As part of this option, internists will be able to:

- 19
- 20 • Answer a question at any place or time and receive immediate feedback;
- 21 • See the rationale behind the answer, along with links related to educational material;
- 22 • Proceed at their preferred pace answering questions during each administration window;
- 23 and,
- 24 • Access all the resources used in practice, such as journals or websites.
- 25

26 The ABIM has invited the internal medicine community to provide suggestions on this new
27 pathway through its Community Insights Network and share feedback through surveys, interviews,
28 user tests, and ABIM's online community ABIM Engage.¹⁵ The ABIM convened a Physician
29 Advisory Panel from members of the Community Insights Network representing a range of practice
30 settings, specialties, and geographies to provide input and feedback throughout the project's
31 development and implementation. The ABIM staff are attending society meetings throughout 2020
32 to offer physicians individualized guidance and ask for their feedback. ABIM will also work with
33 interested societies to explore ways of linking ABIM assessment content with society educational
34 materials.

35
36 Other member board efforts to improve knowledge assessments include more diplomate input into
37 exam content; integrating journal article-based core questions into assessments; modularization of
38 exam content that allows for tailoring of assessments to reflect physicians' actual areas of practice;
39 access during the exam to knowledge resources similar to those used at the point of care; remote
40 proctoring to permit diplomates to be assessed at home or in their office; and performance feedback
41 mechanisms. All boards also provide multiple opportunities for physicians to retake the exam.
42 These program enhancements will significantly reduce the cost diplomates incur to participate in
43 CBC by reducing the need to take time off or travel to a testing center to prepare for the
44 assessment; ensure that the assessment is practice-relevant; emphasize the role of assessment for
45 learning; assure opportunities for remediation of knowledge gaps; and reduce the stress associated
46 with a high-stakes test environment.

47
48 Seventeen member boards have retained the traditional secure exam option for reentry purposes
49 and for diplomates who prefer this exam method. The American Board of Urology has customized

- 1 its traditional secure exam to practice with feedback and assigns CME for areas of substandard
- 2 performance on the exam.

1 *Progress with Refining Part IV, Improvement in Medical Practice*

2
3 The ABMS member boards have broadened the range of acceptable activities that meet the
4 Improvement in Medical Practice (IMP) requirements, including those offered at the physician's
5 institution and/or individual practices, to address physician concerns about the relevance, cost, and
6 burden associated with fulfilling the IMP requirements (Appendix B). In addition to improving
7 alignment between national value-based reporting requirements and continuing certification
8 programs, the boards are implementing several activities related to registries, practice audits, and
9 systems-based practice.

10
11 Patient registries (also known as clinical data registries) provide information to help physicians
12 improve the quality and safety of patient care—for example, by comparing the effectiveness of
13 different treatments for the same disease. While many member boards allow physicians to earn Part
14 IV credit for participating in externally developed patient registries, the American Board of
15 Ophthalmology, American Board of Otolaryngology-Head and Neck Surgery, and American Board
16 of Family Medicine have designed board-specific initiatives that are supported by registry data.

17
18 Several ABMS member boards have developed online practice assessment protocols that allow
19 physicians to assess patient care using evidence-based quality indicators. For example:

- 20
21 • The American Board of Pediatrics (ABP) and American Board of Radiology (ABR) offer
22 free tools to complete an IMP project, including a simplified and flexible template to
23 document small improvements, educational videos, infographics, and enhanced web pages;
24 • The American Board of Preventive Medicine has partnerships with specialty societies to
25 design quality and performance improvement activities for diplomates with a population-
26 based clinical focus;
27 • Fourteen boards have successfully integrated patient experience and peer review into
28 several of the boards' IMP requirements (the American Board of Psychiatry and Neurology
29 has aggressively addressed the issue of cost and unnecessary procedures with an audit and
30 feedback program);
31 • Six boards including the ABA and ABOG, have integrated simulation options; and
32 • Two boards (the ABP and ABR) have a process for individual physicians to develop their
33 own improvement exercises that address an issue of personal importance, using data from
34 their own practices, built around the basic Plan-Do-Study-Act (PDSA) process.

35
36 The ABMS member boards are aligning CBC activities with other organizations' QI efforts to
37 reduce redundancy and physician burden while promoting meaningful participation. Eighteen of
38 the boards encourage participation in organizational QI initiatives through the ABMS Multi-
39 Specialty Portfolio Program™ (described below). Many boards encourage involvement in the
40 development and implementation of safety systems or the investigation and resolution of
41 organizational quality and safety problems. For physicians serving in research or executive roles,
42 some boards have begun to give IMP credit for having manuscripts published, writing peer-
43 reviewed reports, giving presentations, and serving in institutional roles that focus on QI (provided
44 that an explicit PDSA process is used). Physicians who participate in QI projects resulting from
45 morbidity and mortality conferences and laboratory accreditation processes resulting in the
46 identification and resolution of quality and safety issues can also receive IMP credit from some
47 boards.

ABMS Multi-Specialty Portfolio Program

The ABMS Multi-Specialty Portfolio Program (Portfolio Program™) offers health care organizations a way to support physician involvement in their institution's quality and performance improvement initiatives by offering credit for the IMP component of the ABMS Program for MOC (mocportfolioprogam.org). Originally designed as a service for large hospitals, the Portfolio Program™ is extending its reach to physicians whose practices are not primarily in institutions. This includes non-hospital organizations such as academic medical centers, integrated delivery systems, interstate collaboratives, specialty societies, and state medical societies. More than 3,735 types of QI projects have been approved by the Portfolio Program™ in which 18 ABMS member boards participate, focusing on such areas as advanced care planning, cancer screening, cardiovascular disease prevention, depression screening and treatment, provision of immunizations, obesity counseling, patient-physician communication, transitions of care, and patient-safety-related topics including sepsis and central line infection reduction. Many of these projects have had a profound impact on patient care and outcomes. There have been nearly 32,000 instances of physicians receiving IMP credit through participation in the program. Recent additions among the nearly 100 current sponsors include Abt Associates, Lexington Medical Center, Gundersen Health System, Aspirus, and Dayton Children's Hospital.

Update on the Emerging Data and Literature Regarding the Value of CBC

The Council on Medical Education has continued to review published literature and emerging data as part of its ongoing efforts to critically review CBC issues. The annotated bibliography in Appendix C provides a summary of recent studies and editorials published in peer-reviewed journals on the following topics:

- Continuing medical education—A recent article explains new options for completing CME to meet the American Board of Surgery's CBC requirements.
- Knowledge assessments—Recently published articles provide information on the implementation of innovative knowledge assessment programs, such as the longitudinal approach, and describe how physicians prepare for assessments. Several studies show that examination performance correlates with better learning and retention of information and in many instances results in practice changes and better patient care.
- Association between continuous certification and practice related outcomes—Several peer-reviewed studies demonstrate the benefits of participating in a practice improvement program and show that integrating quality and patient safety activities in board-approved continuing certification programs is associated with quality care and improved patient outcomes.
- The impact of continuous certification on medical licensure—Recent studies show that examination performance and level of participation are associated with disciplinary action against medical licensure.
- ABMS and ABMS member board policies and initiatives—Several articles describe the ABMS Vision for the Future Commission's recommendations and the ABMS and ABMS member boards implementation plans.

- 1 • Physician satisfaction with continuous certification—Four studies describe physician
2 satisfaction levels with new CBC requirements and longitudinal assessments.
3
- 4 • Concerns about CBC—These editorials discuss the lingering discontent with participation in
5 continuing certification in order to satisfy federal government, insurer, employer, and
6 credentialing requirements. Concerns about the cost, time, value, and relevance to practice are
7 also discussed.
8
- 9 • Challenges and considerations—Two articles review current issues and challenges associated
10 with CBC.
11

12 OSTEOPATHIC CONTINUOUS CERTIFICATION: AN UPDATE

13
14 The AOA Department of Certifying Board Services assists the osteopathic medical specialty
15 certifying boards with the development and implementation of certification programs and
16 assessments. Under the guidance of the AOA Bureau of Osteopathic Specialists, the specialty
17 certifying boards are committed to enhancing certification services to better serve candidates and
18 diplomates pursuing and maintaining AOA certification.
19

20 In October 2019, the American Osteopathic Board of Family Physicians established an early entry
21 pathway for initial board certification in family medicine. Physicians who meet eligibility
22 requirements and complete two osteopathic in-service examinations may pursue specialty board
23 certification while still completing residency. Upon passing the Early Entry Initial Certification
24 board certification exam in the final year of residency, diplomates will begin the process of
25 Osteopathic Continuous Certification (OCC).
26

27 The American Osteopathic Board of Internal Medicine (AOBIM) will offer an early entry
28 examination for candidates pursuing initial certification beginning in March 2020. The early entry
29 examination provides flexibility and options for completing examination requirements pursuant to
30 certification for internal medicine residents.
31

32 The AOA is developing options for future certification and continuous certification pathways in
33 recognition of the uniqueness of the contemporary practice of medicine and the value of flexible
34 and sustainable certification models. In recognition of the osteopathic-centered approach to patient
35 assessment, evaluation, and treatment, the certification pathways will focus on targeting the
36 medical knowledge, skills, and critical thinking of the competent practicing physician.
37

38 Leading the charge for innovation and change, the American Osteopathic Board of Radiology
39 implemented a self-assessment module (SAM) to meet the cognitive assessment OCC requirement,
40 replacing the 10-year interval examination. Following suit, the American Osteopathic Board of
41 Anesthesiology and American Osteopathic Board of Obstetrics and Gynecology have recently
42 launched innovative assessment models in fulfillment of the requirement to demonstrate
43 competency in specialty medical subject matter. The new models provide increased flexibility by
44 leveraging technology to deliver content at prescribed intervals, relevant to the specialty board's
45 scope of practice.
46

47 Four additional boards—the American Osteopathic Board of Family Physicians, American
48 Osteopathic Board of Emergency Medicine, American Osteopathic Board of Internal Medicine,
49 and the American Osteopathic Board of Surgery—are pursuing changes to their cognitive
50 assessment component of OCC in 2020 to provide a fluid, adaptive process to the diplomates.

1 The AOA offers board certification in 27 primary specialties and 49 subspecialties (including
2 certifications of added qualifications). Nine of the 49 subspecialties are conjoint certifications
3 managed by multiple AOA specialty boards. As of May 31, 2019, a total of 34,294 osteopathic
4 physicians held 39,968 active certifications issued by the AOA's specialty certifying boards.
5 During the 2019 membership year, 2,376 new certifications were processed:

- 6
- 7 • Primary Specialty: 1,925
- 8 • Subspecialty: 386
- 9 • Certification of Added Qualifications (Family Medicine and Preventive Medicine only): 65

10

11 During the 2019 membership year, 1,644 osteopathic continuing certifications were processed.

12 ABMS ADVERTISING

13

14

15 Resolution 301-A-19, "American Board of Medical Specialties Advertising" asks that the AMA
16 oppose the use of any physician fees, dues, etc., for any advertising by the ABMS or any of their
17 component boards to the general public. The ABMS does not have any public marketing
18 campaigns. However, the ABMS does have "Certification Matters," a public website that provides
19 information on currently certified physicians. The purpose of the site is to provide consumers with
20 a free resource to confirm that a physician they are considering is certified by an ABMS member
21 board. There is some paid promotion of the site to increase awareness of its existence, and the
22 ABMS published articles in two of its newsletters when the website was launched.

23

24 In August 2011, the ABMS began to display the CBC participation status of member board-
25 certified physicians online (www.CertificationMatters.org). The information displayed includes the
26 physician's name, certifying board(s), and "yes" or "no" as to whether the physician is meeting
27 CBC standards. The AOA (though not mentioned in the resolution, the AOA maintains a
28 continuous certification program) also provides information about the OCC status of member
29 board-certified physicians upon request through its online DO Directory (www.doprofiles.org).

30

31 The ABMS website is being revised due to a request from the AMA adopted at the 2017 Annual
32 Meeting, based on AMA Policy H-275.924 (26), which states, "The initial certification status of
33 time-limited diplomates shall be listed and publicly available on all American Board of Medical
34 Specialties (ABMS) and ABMS Member Boards' websites and physician certification databases.
35 The names and initial certification status of time-limited diplomates shall not be removed from
36 ABMS and ABMS Member Boards' websites or physician certification databases even if the
37 diplomate chooses not to participate in MOC."

38

39 It is important to note that board certification assures the public that an independent third party has
40 evaluated a physician's skills and abilities and that a physician conducts his or her practice
41 according to a professional code of ethics and remains current with medical practices and
42 procedures. Studies show that the public values physicians' participation in a board certification
43 program and that the public views board certification as an important marker of trust regarding
44 quality care.

45

46 During the past two years, the ABMS has funded research to better understand the public's
47 perception of board certification and a small communication program to promote its value. The
48 research included qualitative (focus groups) and quantitative (National Opinion Research Center at
49 the University of Chicago) survey research. The communication program included posted social
50 media (no costs) and promoted social media (under \$25,000). ABMS funding comes from general
51 revenue sources, including dues from ABMS member boards, and non-dues revenue sources,

1 including ABMS' credentials verification service—ABMS Solutions, which serves as a leading
2 method of primary source verification of a physician's board certification status to hospitals, health
3 systems, and insurers across the county. Through research the ABMS has confirmed that
4 consumers implicitly understand that certification is important and look for information about it
5 when they seek care for themselves and their families. In addition, ABMS board certification is
6 frequently highlighted in consumer media stories which requires no direct costs.

7
8 The AMA's "Truth in Advertising" campaign highlights the need to improve transparency, clarity,
9 and reliability of physician credentials for the patient and public. The AMA opposes any action,
10 regardless of intent, that appears likely to confuse the public about the unique credentials of
11 ABMS- or AOA-BOS-board certified physicians in any medical specialty or that takes advantage
12 of the prestige of any medical specialty for purposes contrary to the public good and safety (H-
13 275.926 [1], Maintaining Medical Specialty Board Certification Standard.)

14
15 The ABMS currently does not have plans to increase investments in the paid public promotion of
16 board certification. However, it is important for the ABMS to reserve the right to advertise and
17 promote board certification to build awareness and accurately communicate its value to the public.
18 The more than 900,000 ABMS board certified physicians derive value from a trusted and
19 recognized credential.¹⁶ This is especially important considering competitive communications for
20 other professions and credentials, some of which are much less rigorous.

21
22 While the AMA maintains robust policy on CBC, including policy related to the cost of
23 development and administration of the CBC components, this policy does not attempt to exert
24 control over ABMS/AOA policies and procedures. Existing AMA Policy H-275.924 (19) states
25 that "the CBC process should be reflective of and consistent with the cost of development and
26 administration of the CBC components, ensure a fair fee structure, and not present a barrier to
27 patient care." Policy D-275.954 (9, 10) also states that our AMA will "encourage the ABMS to
28 ensure that all ABMS member boards provide full transparency related to the costs of preparing,
29 administering, scoring and reporting CBC and certifying examinations" and "encourage the ABMS
30 to ensure that CBC and certifying examinations do not result in substantial financial gain to ABMS
31 member boards, and advocate that the ABMS develop fiduciary standards for its member boards
32 that are consistent with this principle."

33 34 CURRENT AMA POLICIES RELATED TO CBC

35
36 As noted above, the ABMS Board of Directors and some of the ABMS member boards are
37 currently using a new name, "Continuing Board Certification," for their MOC Program (although
38 some ABMS member boards are still referring to the program as MOC). To be consistent with this
39 change, AMA policy was revised in 2019 to change the terms "Maintenance of Certification" that
40 appeared in HOD Policies H-275.924, "AMA Principles on Maintenance of Certification," and D-
41 275.954, "Maintenance of Certification and Osteopathic Continuous Certification," to "Continuing
42 Board Certification" or "CBC," as shown in Appendix A.

43 44 DISCUSSION

45
46 The Council on Medical Education is actively engaged in the implementation of the Vision for the
47 Future Commission's recommendations to improve the process for approximately 590,000
48 physicians who participate in CBC.¹³ The member boards are engaging physicians in surveys and
49 focus groups and in their committee appointments. This report highlights the progress the ABMS
50 and ABMS member boards have made to ease the burden and improve the CBC process for
51 physicians.

1 Resolution 308-A-19, "Maintenance of Certification Moratorium," calls for the immediate end to
2 the high-stakes examination components and the quality initiative/practice improvement
3 components of MOC. However, as noted in this report, the ABMS member boards have moved
4 away from the secure high-stakes secure examination and more than three-fourths of the boards
5 have completed (or soon will be launching) assessment pilots that combine adult learning
6 principles with state-of-the-art technology, enabling delivery of assessments that are a more
7 relevant, less onerous, and cost-efficient process for physicians. Appendix B in this report
8 summarizes these new models. The ABMS member boards have also broadened the range of
9 acceptable activities that meet the IMP requirements, including those offered at the physician's
10 institution and/or individual practices, to address physician concerns about the relevance, cost, and
11 burden associated with fulfilling the IMP requirements. Appendix B also includes a summary of
12 these initiatives.

13
14 The second item in Resolution 308-A-19 calls for the retention of CME and professionalism
15 components (how physicians carry out their responsibilities safely and ethically) of MOC only.
16 Existing HOD Policy D-275.954 (32) already states, "Our AMA will...Continue to support the
17 requirement of CME and ongoing, quality assessments of physicians, where such CME is proven to
18 be cost-effective and shown by evidence to improve quality of care for patients." This policy aligns
19 with the AMA *Code of Medical Ethics* which states, "Physicians should strive to further their
20 medical education throughout their careers, to ensure that they serve patients to the best of their
21 abilities and live up to professional standards of excellence. Participating in certified continuing
22 medical education (CME) activities is critical to fulfilling this professional commitment to lifelong
23 learning."¹⁷ The Council on Medical Education is committed to ensuring that CBC programs
24 support physicians' ongoing learning and practice improvement and serve to assure the public that
25 physicians are providing high-quality patient care.

26
27 The third item in Resolution 308-A-19, asking that certification status be restored for all diplomates
28 who have lost certification status solely because they have not complied with MOC requirements,
29 will be addressed by the recently established ABMS Remediation Task Force. As noted in this
30 report, the ABMS established the Task Force to address the Vision Commission's eighth
31 recommendation, which reads, "The ABMS Boards must have clearly defined remediation
32 pathways to enable diplomates to meet continuing certification standards in advance of and
33 following any loss of certification." The Task Force will be responsible for defining aspects and
34 suggest pathways for remediation of gaps prior to certification loss as well as pathways for
35 regaining eligibility after loss of certification.

36 37 SUMMARY AND RECOMMENDATIONS

38
39 Throughout the past year, the Council has continued to monitor the development of continuing
40 board certification programs and to work with the ABMS, ABMS member boards, AOA, and state
41 and specialty medical societies to identify and suggest improvements to these programs. The AMA
42 has also been actively engaged in the implementation of the Continuing Board Certification: Vision
43 for the Future Commission's recommendations for the future continuing board certification
44 process.

45
46 The Council on Medical Education therefore recommends that the following recommendation be
47 adopted in lieu of Resolutions 301-A-19 and 308-A-19 and the remainder of the report be filed.

- 1 1. That our American Medical Association (AMA), through its Council on Medical Education,
2 continue to work with the American Board of Medical Specialties (ABMS) and ABMS
3 member boards to implement key recommendations outlined by the Continuing Board
4 Certification: Vision for the Future Commission in its final report, including the development
5 of new, integrated standards for continuing certification programs by 2020 that will address the
6 Commission's recommendations for flexibility in knowledge assessment and advancing
7 practice, feedback to diplomates, and consistency. (New HOD Policy)

Fiscal Note: \$2,500.

APPENDIX A:
CURRENT HOD POLICIES RELATED TO CONTINUING BOARD CERTIFICATION

H-275.924, "Continuing Board Certification"

AMA Principles on Continuing Board Certification

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

15. The CBC program should not be a mandated requirement for licensure, credentialing, recredentialing, privileging, reimbursement, network participation, employment, or insurance panel participation.
 16. Actively practicing physicians should be well-represented on specialty boards developing CBC.
 17. Our AMA will include early career physicians when nominating individuals to the Boards of Directors for ABMS member boards.
 18. CBC activities and measurement should be relevant to clinical practice.
 19. The CBC process should be reflective of and consistent with the cost of development and administration of the CBC components, ensure a fair fee structure, and not present a barrier to patient care.
 20. Any assessment should be used to guide physicians' self-directed study.
 21. Specific content-based feedback after any assessment tests should be provided to physicians in a timely manner.
 22. There should be multiple options for how an assessment could be structured to accommodate different learning styles.
 23. Physicians with lifetime board certification should not be required to seek recertification.
 24. No qualifiers or restrictions should be placed on diplomates with lifetime board certification recognized by the ABMS related to their participation in CBC.
 25. Members of our House of Delegates are encouraged to increase their awareness of and participation in the proposed changes to physician self-regulation through their specialty organizations and other professional membership groups.
 26. The initial certification status of time-limited diplomates shall be listed and publicly available on all American Board of Medical Specialties (ABMS) and ABMS Member Boards websites and physician certification databases. The names and initial certification status of time-limited diplomates shall not be removed from ABMS and ABMS Member Boards websites or physician certification databases even if the diplomate chooses not to participate in CBC.
 27. Our AMA will continue to work with the national medical specialty societies to advocate for the physicians of America to receive value in the services they purchase for Continuing Board Certification from their specialty boards. Value in CBC should include cost effectiveness with full financial transparency, respect for physicians' time and their patient care commitments, alignment of CBC requirements with other regulator and payer requirements, and adherence to an evidence basis for both CBC content and processes.
- (Policy Timeline: CME Rep. 16, A-09 Reaffirmed: CME Rep. 11, A-12 Reaffirmed: CME Rep. 10, A-12 Reaffirmed in lieu of Res. 313, A-12 Reaffirmed: CME Rep. 4, A-13 Reaffirmed in lieu of Res. 919, I-13 Appended: Sub. Res. 920, I-14 Reaffirmed: CME Rep. 2, A-15 Appended: Res. 314, A-15 Modified: CME Rep. 2, I-15 Reaffirmation A-16 Reaffirmed: Res. 309, A-16 Modified: Res. 307, I-16 Reaffirmed: BOT Rep. 05, I-16 Appended: Res. 319, A-17 Reaffirmed in lieu of: Res. 322, A-17 Modified: Res. 953, I-17 Reaffirmation: A-19 Modified: CME Rep. 02, A-19)

D-275.954, "Continuing Board Certification"

Our AMA will:

1. Continue to monitor the evolution of Continuing Board Certification (CBC), continue its active engagement in discussions regarding their implementation, encourage specialty boards to investigate and/or establish alternative approaches for CBC, and prepare a yearly report to the House of Delegates regarding the CBC process.
2. Continue to review, through its Council on Medical Education, published literature and emerging data as part of the Council's ongoing efforts to critically review CBC issues.
3. Continue to monitor the progress by the American Board of Medical Specialties (ABMS) and its member boards on implementation of CBC, and encourage the ABMS to report its research findings on the issues surrounding certification and CBC on a periodic basis.

4. Encourage the ABMS and its member boards to continue to explore other ways to measure the ability of physicians to access and apply knowledge to care for patients, and to continue to examine the evidence supporting the value of specialty board certification and CBC.
5. Work with the ABMS to streamline and improve the Cognitive Expertise (Part III) component of CBC, including the exploration of alternative formats, in ways that effectively evaluate acquisition of new knowledge while reducing or eliminating the burden of a high-stakes examination.
6. Work with interested parties to ensure that CBC uses more than one pathway to assess accurately the competence of practicing physicians, to monitor for exam relevance and to ensure that CBC does not lead to unintended economic hardship such as hospital de-credentialing of practicing physicians.
7. Recommend that the ABMS not introduce additional assessment modalities that have not been validated to show improvement in physician performance and/or patient safety.
8. Work with the ABMS to eliminate practice performance assessment modules, as currently written, from CBC requirements.
9. Encourage the ABMS to ensure that all ABMS member boards provide full transparency related to the costs of preparing, administering, scoring and reporting CBC and certifying examinations.
10. Encourage the ABMS to ensure that CBC and certifying examinations do not result in substantial financial gain to ABMS member boards, and advocate that the ABMS develop fiduciary standards for its member boards that are consistent with this principle.
11. Work with the ABMS to lessen the burden of CBC on physicians with multiple board certifications, particularly to ensure that CBC is specifically relevant to the physician's current practice.
12. Work with key stakeholders to (a) support ongoing ABMS member board efforts to allow multiple and diverse physician educational and quality improvement activities to qualify for CBC; (b) support ABMS member board activities in facilitating the use of CBC quality improvement activities to count for other accountability requirements or programs, such as pay for quality/performance or PQRS reimbursement; (c) encourage ABMS member boards to enhance the consistency of quality improvement programs across all boards; and (d) work with specialty societies and ABMS member boards to develop tools and services that help physicians meet CBC requirements.
13. Work with the ABMS and its member boards to collect data on why physicians choose to maintain or discontinue their board certification.
14. Work with the ABMS to study whether CBC is an important factor in a physician's decision to retire and to determine its impact on the US physician workforce.
15. Encourage the ABMS to use data from CBC to track whether physicians are maintaining certification and share this data with the AMA.
16. Encourage AMA members to be proactive in shaping CBC by seeking leadership positions on the ABMS member boards, American Osteopathic Association (AOA) specialty certifying boards, and CBC Committees.
17. Continue to monitor the actions of professional societies regarding recommendations for modification of CBC.
18. Encourage medical specialty societies leadership to work with the ABMS, and its member boards, to identify those specialty organizations that have developed an appropriate and relevant CBC process for its members.
19. Continue to work with the ABMS to ensure that physicians are clearly informed of the CBC requirements for their specific board and the timelines for accomplishing those requirements.
20. Encourage the ABMS and its member boards to develop a system to actively alert physicians of the due dates of the multi-stage requirements of continuous professional development and performance in practice, thereby assisting them with maintaining their board certification.
21. Recommend to the ABMS that all physician members of those boards governing the CBC process be required to participate in CBC.

22. Continue to participate in the National Alliance for Physician Competence forums.
 23. Encourage the PCPI Foundation, the ABMS, and the Council of Medical Specialty Societies to work together toward utilizing Consortium performance measures in Part IV of CBC.
 24. Continue to assist physicians in practice performance improvement.
 25. Encourage all specialty societies to grant certified CME credit for activities that they offer to fulfill requirements of their respective specialty board s CBC and associated processes.
 26. Support the American College of Physicians as well as other professional societies in their efforts to work with the American Board of Internal Medicine (ABIM) to improve the CBC program.
 27. Oppose those maintenance of certification programs administered by the specialty boards of the ABMS, or of any other similar physician certifying organization, which do not appropriately adhere to the principles codified as AMA Policy on Continuing Board Certification.
 28. Ask the ABMS to encourage its member boards to review their maintenance of certification policies regarding the requirements for maintaining underlying primary or initial specialty board certification in addition to subspecialty board certification, if they have not yet done so, to allow physicians the option to focus on continuing board certification activities relevant to their practice.
 29. Call for the immediate end of any mandatory, secured recertifying examination by the ABMS or other certifying organizations as part of the recertification process for all those specialties that still require a secure, high-stakes recertification examination.
 30. Support a recertification process based on high quality, appropriate Continuing Medical Education (CME) material directed by the AMA recognized specialty societies covering the physician s practice area, in cooperation with other willing stakeholders, that would be completed on a regular basis as determined by the individual medical specialty, to ensure lifelong learning.
 31. Continue to work with the ABMS to encourage the development by and the sharing between specialty boards of alternative ways to assess medical knowledge other than by a secure high stakes exam.
 32. Continue to support the requirement of CME and ongoing, quality assessments of physicians, where such CME is proven to be cost-effective and shown by evidence to improve quality of care for patients.
 33. Through legislative, regulatory, or collaborative efforts, will work with interested state medical societies and other interested parties by creating model state legislation and model medical staff bylaws while advocating that Continuing Board Certification not be a requirement for: (a) medical staff membership, privileging, credentialing, or recredentialing; (b) insurance panel participation; or (c) state medical licensure.
 34. Increase its efforts to work with the insurance industry to ensure that continuing board certification does not become a requirement for insurance panel participation.
 35. Advocate that physicians who participate in programs related to quality improvement and/or patient safety receive credit for CBC Part IV.
 36. Continue to work with the medical societies and the American Board of Medical Specialties (ABMS) member boards that have not yet moved to a process to improve the Part III secure, high-stakes examination to encourage them to do so.
 37. Our AMA will, through its Council on Medical Education, continue to work with the American Board of Medical Specialties (ABMS), ABMS Committee on Continuing Certification (3C), and ABMS Stakeholder Council to pursue opportunities to implement the recommendations of the Continuing Board Certification: Vision for the Future Commission and AMA policies related to continuing board certification.
- (Policy Timeline: CME Rep. 2, I-15 Appended: Res. 911, I-15 Appended: Res. 309, A-16 Appended: CME Rep. 02, A-16 Appended: Res. 307, I-16 Appended: Res. 310, I-16 Modified: CME Rep. 02, A-17 Reaffirmed: Res. 316, A-17 Reaffirmed in lieu of: Res. 322, A-17 Appended: CME Rep. 02, A-18 Appended: Res. 320, A-18 Appended: Res. 957, I-18 Reaffirmation: A-19 Modified: CME Rep. 02, A-19)

H-275.926, "Medical Specialty Board Certification Standards"

Our AMA:

(1) Opposes any action, regardless of intent, that appears likely to confuse the public about the unique credentials of American Board of Medical Specialties (ABMS) or American Osteopathic Association Bureau of Osteopathic Specialists (AOA-BOS) board certified physicians in any medical specialty, or take advantage of the prestige of any medical specialty for purposes contrary to the public good and safety.

(2) Opposes any action, regardless of intent, by organizations providing board certification for non-physicians that appears likely to confuse the public about the unique credentials of medical specialty board certification or take advantage of the prestige of medical specialty board certification for purposes contrary to the public good and safety.

(3) Continues to work with other medical organizations to educate the profession and the public about the ABMS and AOA-BOS board certification process. It is AMA policy that when the equivalency of board certification must be determined, accepted standards, such as those adopted by state medical boards or the Essentials for Approval of Examining Boards in Medical Specialties, be utilized for that determination.

(4) Opposes discrimination against physicians based solely on lack of ABMS or equivalent AOA-BOS board certification, or where board certification is one of the criteria considered for purposes of measuring quality of care, determining eligibility to contract with managed care entities, eligibility to receive hospital staff or other clinical privileges, ascertaining competence to practice medicine, or for other purposes. Our AMA also opposes discrimination that may occur against physicians involved in the board certification process, including those who are in a clinical practice period for the specified minimum period of time that must be completed prior to taking the board certifying examination.

(5) Advocates for nomenclature to better distinguish those physicians who are in the board certification pathway from those who are not.

(6) Encourages member boards of the ABMS to adopt measures aimed at mitigating the financial burden on residents related to specialty board fees and fee procedures, including shorter preregistration periods, lower fees and easier payment terms.

(Policy Timeline: Res. 318, A-07 Reaffirmation A-11 Modified: CME Rep. 2, I-15 Modified: Res. 215, I-19)

APPENDIX B:
 IMPROVEMENTS TO THE AMERICAN BOARD OF MEDICAL SPECIALTIES (ABMS)
 PART III, ASSESSMENT OF KNOWLEDGE, JUDGMENT, AND SKILLS AND PART IV,
 IMPROVEMENT IN MEDICAL PRACTICE*

American Board of:	Original Format	New Models/Innovations
Allergy and Immunology (ABAI) abai.org	<p>Part III: Computer-based, secure exam was administered at a proctored test center once a year. Diplomates were required to pass the exam once every 10 years.</p> <p><i>Traditional secure exam only offered for re-entry.</i></p>	<p>Part III: In 2018, ABAI-Continuous Assessment Program Pilot was implemented in place of 10-year secure exam:</p> <ul style="list-style-type: none"> • A 10-year program with two 5-year cycles; • Open-book annual exam with approximately 80 questions; • Customized to practice; • Mostly article-based with some core questions during each 6-month cycle; • Diplomates must answer 3 questions for each of 10 journal articles in each cycle posted in February and August; • Questions can be answered independently for each article; • Diplomat feedback required on each question; • Opportunity to drop the two lowest 6-month cycle scores during each 5-year period to allow for unexpected life events; and • Diplomates can take exam where and when it is convenient and have the ability to complete questions on PCs, laptops, MACs, tablets, and smart phones by using the new diplomate dashboard accessed via the existing ABAI Web Portal page.
	<p>Part IV: ABAI diplomates receive credit for participation in registries.</p>	<p>Part IV: In 2018, new Part IV qualifying activities provided credit for a greater range of Improvement in Medical Practice (IMP) activities that physicians complete at their institutions and/or individual practices. A practice assessment/quality improvement (QI) module must be completed once every 5 years.</p>

<p>Anesthesiology (ABA) theaba.org</p>	<p>Part III: MOCA 2.0 introduced in 2014 to provide a tool for ongoing low-stakes assessment with more extensive, question-specific feedback. Also provides focused content that could be reviewed periodically to refresh knowledge and document cognitive expertise.</p> <p><i>All diplomates with time-limited certification in anesthesiology that expired on or before December 31, 2015 and diplomates whose subspecialty certificates expired on or before December 31, 2016, must complete the traditional MOCA[®] requirements before they can register for MOCA 2.0[®].</i></p>	<p>Part III: MOCA Minute[®] replaced the MOCA exam:</p> <ul style="list-style-type: none"> • Customized to practice; • Diplomates must answer 30 questions per calendar quarter (120 per year), no matter how many certifications they are maintaining; and • Knowledge Assessment Report shows details on the MOCA Minute questions answered incorrectly, peer performance, and links to related CME.
	<p>Part IV²: Traditional MOCA requirements include completion of case evaluation and simulation course during the 10-year MOCA cycle. One activity must be completed between Years 1 to 5, and the second between Years 6 to 10. An attestation is due in Year 9.</p>	<p>Part IV²: ABA added and expanded multiple activities for diplomates to demonstrate that they are participating in evaluations of their clinical practice and are engaging in practice improvement. Diplomates may choose activities that are most relevant to their practice; reporting templates no longer required for self-report activities; and simulation activity not required. An attestation is due in Year 9.</p>
<p>Colon and Rectal Surgery (ABCRS) abcrcs.org</p>	<p>Part III: Computer-based secure exam administered at a proctored test center once a year (in May). Diplomates must pass the exam once every 10 years.</p> <p><i>The secure exam is no longer offered.</i></p>	<p>Part III¹: New Continuous Certification Longitudinal Assessment Program (CertLink[®]) replaced the high-stakes Part III Cognitive Written Exam which was required every 10 years:</p> <ul style="list-style-type: none"> • Diplomates must complete 12 to 15 questions per quarter through the CertLink[®] platform. • The fifth year of the cycle can be a year free of questions or used to extend the cycle if life events intervene.
	<p>Part IV: Requires ongoing participation in a local, regional, or national outcomes registry or quality assessment program.</p>	<p>Part IV: If there are no hospital-based or other programs available, diplomates can maintain a log of their own cases and morbidity outcomes utilizing the ACS Surgeon Specific Case Log System (with tracking of 30-day complications). Resources are provided to enable completion of QI activities based on the results.</p>

<p>Dermatology (ABD) abderm.org</p>	<p>Part III: Computer-based secure modular exam still administered at a proctored test center twice a year or by remote proctoring technology. Diplomates must pass the exam once every 10 years.</p> <p>Test preparation material available 6 months before the exam at no cost. The material includes diagnoses from which the general dermatology clinical images will be drawn and questions that will be used to generate the subspecialty modular exams.</p> <p>Examinees are required to take the general dermatology module, consisting of 100 clinical images to assess diagnostic skills, and can then choose among 50-item subspecialty modules.</p>	<p>Part III¹: ABD completed trials employing remote proctoring technology to monitor exam administration in the diplomates' homes or offices. On January 6, 2020, diplomates can participate in CertLink[®]:</p> <ul style="list-style-type: none"> • Diplomates must complete 13 questions per quarter for a total of 52 questions; • Diplomates will receive a mix of visual recognition questions, specialty area questions, and article-based questions; • Written references and online resources are allowed while answering questions; and • Diplomates are permitted to take one quarter off per year without advanced permission or penalty, using the "Time Off" feature (if diplomate opts not to take a quarter off, his/her lowest scoring quarter during that year will be eliminated from scoring).
	<p>Part IV²: Tools diplomates can use for Part IV include:</p> <ul style="list-style-type: none"> • Focused practice improvement modules. • ABD's basal cell carcinoma registry tool. <p>Partnering with specialty society to transfer any MOC-related credit directly to Board.</p>	<p>Part IV²: ABD developed more than 40 focused practice improvement modules that are simpler to complete and cover a wide range of topics to accommodate different practice types.</p> <p>Peer and patient communication surveys are now optional.</p>
<p>Emergency Medicine (ABEM) abem.org</p>	<p>Part III: ABEM's ConCert[™], computer-based, secure exam administered at a proctored test center twice a year. Diplomates must pass the exam once every 10 years.</p>	<p>Part III: In 2020, a ConCert[™] alternative, known as MyEMCert, will be piloted. MyEMCert will consist of:</p> <ul style="list-style-type: none"> • Short assessment modules, consisting of up to 50 questions each; • Each module addresses a category of common patient presentations in the emergency department; • Eight modules are required in each 10-year certification. (ABEM-diplomates who have less than 10 years remaining on their current certification and who choose to participate in MyEMCert will have less time to complete 8 modules before their certification expires); • Each module includes recent advances in Emergency Medicine (that may or may not be related to

		<p>the category of patient presentation). Participants in MyEMCert do not also have to take LLSAs;</p> <ul style="list-style-type: none"> • Three attempts are available for each registration; • MyEMCert modules will be available 24/7/365; and • Diplomates can look up information—for example, textbooks or online resources to which they subscribe—while completing a module.
	<p>Part IV²: Physicians may complete practice improvement efforts related to any of the measures or activities listed on the ABEM website. Others that are not listed, may be acceptable if they follow the four steps ABEM requirements.</p>	<p>Part IV²: ABEM is developing a pilot program to incorporate clinical data registry.</p> <p>ABEM diplomates receive credit for improvements they are making in their practice setting.</p> <p>Must complete and attest to two PI activities, one in years one through five of certification, and one in years six through ten.</p>
<p>Family Medicine (ABFM) theabfm.org</p>	<p>Part III: One-day Family Medicine Certification Exam. Traditional computer-based secure exam administered at a proctored test center twice a year or by remote proctoring technology. Diplomates must pass the exam once every 10 years.</p> <p>The exam day schedule consists of four 95-minute sections (75 questions each) and 100 minutes of pooled break time available between sections.</p>	<p>Part III: In 2018, ABFM launched Family Medicine Certification Longitudinal Assessment (FMCLA), a pilot to study the feasibility and validity of an alternative to the 10-year examination. The FMCLA pilot evaluation will be conducted over several years to collect feedback and data to evaluate the quality, effectiveness, and acceptability to the program.</p> <ul style="list-style-type: none"> • Limited to Diplomates currently certified and in the tenth year of certification that ended in 2020; • Diplomates must complete 25 questions per quarter; 300 questions over a 4-year time period; • Diplomates receive immediate feedback after each response; • Clinical references similar to those used in practice allowed during the assessment; and • Questions can be completed at the place and time of the diplomate’s choice.
	<p>Part IV²: IMP Projects include:</p> <ul style="list-style-type: none"> • Collaborative Projects: Structured projects that involve physician teams 	<p>Part IV²: ABFM developed and launched the national primary care registry (PRIME)</p>

	<p>collaborating across practice sites and/or institutions to implement strategies designed to improve care.</p> <ul style="list-style-type: none"> • Projects Initiated in the Workplace: These projects are based on identified gaps in quality in a local or small group setting. • Web-based Activities: Self-paced activities that physicians complete within their practice setting (these activities are for physicians, who do not have access to other practice improvement initiatives). 	<p>to reduce time and reporting requirements.</p>
<p>Internal Medicine (ABIM) abim.org</p>	<p>Part III: Computer-based secure exam administered at a proctored test center. Diplomates must pass the exam once every 10 years.</p> <p>This option includes open-book access (to UpToDate®) that physicians requested.</p> <p><i>ABIM introduced grace period for physicians to retry assessments for additional study and preparation if initially unsuccessful.</i></p> <p>Part IV²: Practice assessment/QI activities include identifying an improvement opportunity in practice, implementing a change to address that opportunity, and measuring the impact of the change.</p> <p>Diplomates can earn MOC points for many practice assessment/QI projects through their medical specialty societies, hospitals, medical groups, clinics, or other health-related organizations.</p>	<p>Part III: In 2020, the Knowledge Check-In, will be an option for diplomates in most specialties:</p> <ul style="list-style-type: none"> • New 2-year open-book (access to <i>UpToDate</i>®) assessment; • Diplomates receive immediate performance feedback; and • Assessments can be taken at the diplomate’s home or office, or at a computer testing facility. <p>ABIM anticipates launching a longitudinal assessment option in 2022.</p> <p><i>ABIM has developed collaborative pathways with the American College of Cardiology and American Society of Clinical Oncology for physicians to maintain board certification in several subspecialties. ABIM is working with other specialty societies to explore the development of pathways.</i></p> <p>Part IV²: Optional; incentive for participation in approved activities. Increasing number of specialty-specific IMP activities recognized for credit (activities that physicians are participating in within local practice and institutions).</p>

<p>Medical Genetics and Genomics (ABMGG) abmgg.org</p>	<p>Part III: Computer-based secure exam administered at a proctored test center once a year (August). Diplomates must pass the exam once every 10 years.</p> <p><i>The secure exam is no longer offered.</i></p>	<p>Part III¹: In 2020, a longitudinal assessment program (CertLink[®]) will replace the 10-year, Continuing Certification (MOC) high-stakes examination:</p> <ul style="list-style-type: none"> • Diplomates receive 24 questions every 6 months, regardless of number of specialties in which a diplomate is certified; • Diplomates must answer all questions by the end of each 6-month timeframe (5 minutes allotted per question); • Resources allowed, collaboration with colleagues not allowed; • Realtime feedback and performance provided for each question; and • "Clones" of missed questions will appear in later timeframes to help reinforce learning.
	<p>Part IV²: Diplomates can choose from the list of options to complete practice improvement modules in areas consistent with the scope of their practice.</p>	<p>Part IV²: ABMGG is developing opportunities to allow diplomates to use activities already completed at their workplace to fulfill certain requirements.</p> <p><i>Expanding accepted practice improvement activities for laboratorians.</i></p>
<p>Neurological Surgery (ABNS) abns.org</p>	<p>Part III: The 10-year secure exam can be taken from any computer, i.e., in the diplomate’s office or home. Access to reference materials is not restricted; it is an open book exam.</p> <p>On applying to take the exam, a diplomate must assign a person to be his or her proctor. Prior to the exam, that individual will participate in an on-line training session and “certify” the exam computers.</p> <p><i>The secure exam is no longer offered.</i></p>	<p>Part III: In 2018, Core Neurosurgical Knowledge, an annual adaptive cognitive learning tool and modules, replaced the 10-year secure exam:</p> <ul style="list-style-type: none"> • Open book exam focusing on 30 or so evidence-based practice principles critical to emergency, urgent, or critical care; • Shorter, relevant, and more focused questions than the prior exam; • Diplomates receive immediate feedback for each question and references with links and/or articles are provided; and • Web-based format with 24/7 access from the diplomates’ home or office.

	<p>Part IV: Diplomates receive credit for documented participation in an institutional QI project.</p>	<p>Part IV: Diplomates are required to participate in a meaningful way in morbidity and mortality conferences (local, regional, and/or national).</p> <p>For those diplomates participating in the Pediatric Neurosurgery, CNS-ES, NeuCC focused practice programs, a streamlined case log is required to confirm that their practice continues to be focused and the diplomate is required to complete a learning tool that includes core neurosurgery topics and an additional eight evidence-based concepts critical to providing emergency, urgent, or critical care in their area of focus.</p>
<p>Nuclear Medicine (ABNM) abnm.org</p>	<p>Part III: Computer-based secure exam administered at a proctored test center once a year (October). Diplomates must pass the exam once every 10 years.</p>	<p>Part III¹: Diplomates can choose between the 10-year exam or a longitudinal assessment pilot program (CertLink[®]).</p> <ul style="list-style-type: none"> • Diplomates receive 9 questions per quarter and up to 4 additional questions that are identical or very similar to questions previously answered (called “clones”) and many will have images; • Educational resources can be used; • Diplomates receive immediate feedback with critiques and references; and • Allows for emergencies and qualifying life events.
	<p>Part IV: Diplomates must complete one of the three following requirements each year.</p> <ol style="list-style-type: none"> 1) Attestation that the diplomate has participated in QI activities as part of routine clinical practice, such as participation in a peer review process, attendance at tumor boards, or membership on a radiation safety committee. 2) Participation in an annual practice survey related to approved clinical guidelines released by the ABNM. The survey has several questions based on review of actual cases. Diplomates receive a summary of the answers provided by other physicians that allows them to compare their practice to peers. 3) Improvement in Medical Practice projects designed by diplomates or provided by professional groups such as 	<p>Part IV: ABNM recognizes QI activities in which physicians participate in their clinical practice.</p>

	<p>the SNMMI. Project areas may include medical care provided for common/major health conditions, physician behaviors, such as communication and professionalism, as they relate to patient care, and many others. The projects typically follow the model of Plan, Do, Study, Act. The ABNM has developed a few IMP modules for the SNMMI, Alternatively, diplomates may design their own project.</p>	
<p>Obstetrics and Gynecology (ABOG) abog.org</p>	<p>Part III: The secure, external assessment is offered in the last year of each ABOG diplomate’s 6-year cycle in a modular test format; diplomates can choose two selections that are the most relevant to their current practice. The exam administered at a proctored test center.</p>	<p>Part III: ABOG completed a pilot program and integrated the article-based self-assessment (Part II) and external assessment (Part III) requirements, allowing diplomates to continuously demonstrate their knowledge of the specialty. The pilot allowed diplomates to earn an exemption from the current computer-based exam in the sixth year of the program if they reach a threshold of performance during the first 5 years of the self-assessment program.</p> <p>Since 2019, diplomates can choose to take the 6-year exam or participate in Performance Pathway, an article-based self-assessment (with corresponding questions) which showcases new research studies, practice guidelines, recommendations, and up-to-date reviews. Diplomates who participate in Performance Pathway are required to read a total of 180 selected articles and answer 720 questions about the articles over the 6-year MOC cycle.</p>
	<p>Part IV²: Diplomates required to participate in one of the available IMP activities yearly in MOC Years 1-5.</p> <p>ABOG will consider structured QI projects (IMP modules, QI efforts, simulation courses) in obstetrics and gynecology for Part IV credit. These projects must demonstrate improvement in care and be based on accepted improvement science and methodology.</p> <p>Newly developed QI projects from organizations with a history of successful QI projects are also eligible for approval.</p>	<p>Part IV²: ABOG recognizes work with QI registries for credit.</p> <p>ABOG continues to expand the list of approved activities which can be used to complete the Part IV.</p>

<p>Ophthalmology (ABO) abop.org</p>	<p>Part III: The Demonstration of Ophthalmic Cognitive Knowledge (DOCK) high-stakes, 10-year exam administered through 2018.</p> <p><i>The secure exam is no longer offered.</i></p>	<p>Part III: In 2019, Quarterly Questions™ replaced the DOCK Examination for all diplomates:</p> <ul style="list-style-type: none"> • Diplomates receive 50 questions (40 knowledge-based and 10 article-based); • The questions should not require preparation in advance, but a content outline for the questions will be available; • The journal portion will require reading five articles from a list of options key ophthalmic journal articles with questions focused on the application of this information to patient care; • Diplomates receive immediate feedback and recommendations for resources related to gaps in knowledge; and • Questions can be completed remotely at home or office through computer, tablet, or mobile apps.
	<p>Part IV²: Diplomates whose certificates expire on or before December 31, 2020 must complete one of the following options; all other diplomates complete two activities:</p> <ul style="list-style-type: none"> • Read QI articles through Quarterly Questions; • Choose a QI CME activity; • Create an individual IMP activity; or • Participate in the ABMS multi-specialty portfolio program pathway. 	<p>Part IV²: Diplomates can choose to:</p> <ul style="list-style-type: none"> • Select 3 QI journal articles from ABO’s reading list and answer two questions about each article (this activity option may be used only once during each 10-year cycle). • Design a registry-based IMP Project using their AAO IRIS® Registry Data; • Create a customized, self-directed IMP activity; or • Participate in the ABMS multi-specialty portfolio program through their institution.
<p>Orthopaedic Surgery (ABOS) abos.org</p>	<p>Part III: Computer-based secure modular exam administered at a proctored test center. Diplomates must pass the exam once every 10 years. The optional oral exam is given in Chicago in July.</p> <p>Diplomates without subspecialty certifications can take practice-profiled exams in orthopaedic sports medicine and surgery of the hand.</p> <p>General orthopaedic questions were eliminated from the practice-profiled exams so diplomates are only tested in areas relevant to their practice.</p>	<p>Part III: In 2020, a new longitudinal assessment program (ABOS WLA) the Knowledge Assessment, will be available to all diplomates. This pathway may be chosen instead of an ABOS computer-based or oral recertification 10-year exam:</p> <ul style="list-style-type: none"> • Diplomates must answer 30 questions (from each Knowledge Source chosen by the diplomate); • The assessment is open-book and diplomates can use the Knowledge Sources, if the questions are answered within the 3-minute window and that the answer

	<p>Detailed blueprints are being produced for all exams to provide additional information for candidates to prepare for and complete the exams.</p> <p>Eight different practice-profiled exams offered to allow assessment in the diplomate's practice area.</p>	<p>represents the diplomate's own work; and</p> <ul style="list-style-type: none"> • Questions can be answered remotely at home or office through computer, tablet, or mobile apps.
	<p>Part IV: Case lists allow diplomates to review their practice including adhering to accepted standards, patient outcomes, and rate and type of complications.</p> <p>Case list collection begins on January 1st of the calendar year that the diplomate plans to submit their recertification application and is due by December 1. The ABOS recommends that this be done in Year 7 of the 10-year MOC Cycle, but it can be done in Year 8 or 9. A minimum of 35 cases is required for the recertification candidate to sit for the recertification exam of their choice. Diplomates receive a feedback report based on their submitted case list.</p>	<p>Part IV: ABOS is streamlining the case list entry process to make it easier to enter cases and classify complications.</p>
<p>Otolaryngology – Head and Neck Surgery (ABOHNS) aboto.org</p>	<p>Part III: Computer-based secure modular exam administered at a proctored test center. Diplomates must pass the exam once every 10 years.</p>	<p>Part III¹: ABOHNS is piloting a CertLink[®]-based longitudinal assessment:</p> <ul style="list-style-type: none"> • Diplomates receive 10 to 15 questions per quarter; • Immediate, personalized feedback provided regarding the percentage of questions answered correctly; • Questions can be answered at a diplomate's convenience so long as all questions are answered by the end of each quarter; and • Remote access via desktop or laptop computer (some items will contain visuals).
	<p>Part IV²: The three components of Part IV include:</p> <ul style="list-style-type: none"> • A patient survey; • A peer survey; and • A registry that will be the basis for QI activities. 	<p>Part IV²: ABOHNS is partnering with the American Academy of Otolaryngology-Head and Neck Surgery in their development of a RegentSM registry. Selected data will be extracted from RegentSM for use in practice improvement modules that diplomates can use to meet IMP requirements. ABOHNS is working to identify and accept improvement activities that diplomates engage in as part of their practice.</p>

		ABOHNS will roll out the last section of MOC, Part IV, which is still under development. Part IV will consist of three components, a patient survey, a professional survey, and a Performance Improvement Module (PIM).
Pathology (ABPath) abpath.org	Part III: Computer-based secure modular exam administered at the ABP Exam Center in Tampa, Florida twice a year (March and August). Remote computer exams can be taken anytime 24/7 that the physician chooses during the assigned 2-week period (spring and fall) from their home or office. Physicians can choose from more than 90 modules, covering numerous practice areas for a practice-relevant assessment. Diplomates must pass the exam once every 10 years.	Part III¹: The ABPath CertLink [®] pilot program is available for all diplomates: <ul style="list-style-type: none"> • Customization allows diplomates to select questions from practice (content) areas relevant to their practice. • Diplomates can log in anytime to answer 15 to 25 questions per quarter; • Each question must be answered within 5 minutes; • Resources (e.g. internet, textbooks, journals) can be used; and • Diplomates receive immediate feedback on whether each question is answered correctly or incorrectly, with a short narrative about the topic (critique), and references.
	Part IV²: Diplomates must participate in at least one inter-laboratory performance improvement and quality assurance program per year appropriate for the spectrum of anatomic and clinical laboratory procedures performed in that laboratory.	Part IV²: IMP requirements must be reported as part of a reporting period every 2 years via PATHway. There are three aspects to IMP: <ul style="list-style-type: none"> • Laboratory Accreditation; • Laboratory Performance Improvement and Quality Assurance; and • Individual Performance Improvement and Quality Assurance.
Pediatrics (ABP) abp.org	Part III: Computer-based secure exam administered at a proctored test center. Diplomates must pass the exam once every 10 years.	Part III: In 2019, a new testing platform with shorter and more frequent assessments, Maintenance of Certification Assessment for Pediatrics (MOCA-Peds), was implemented: <ul style="list-style-type: none"> • Allows for questions to be tailored to the pediatrician's practice profile; • A series of questions released through mobile devices or a web browser at regular intervals; • Diplomates receive 20 questions per quarter (may be answered at any time during the quarter);

		<ul style="list-style-type: none"> • Diplomates receive immediate feedback and references; • Resources (i.e., internet, books) can be used. <p><i>Those who wish to continue taking the exam once every 5 years in a secure testing facility will be able to do so.</i></p>
	<p>Part IV²: Diplomates must earn at least 40 points every 5 years, in one of the following activities:</p> <ul style="list-style-type: none"> • Local or national QI projects • Diplomates’ own project • National Committee for Quality Assurance Patient-Centered Medical Home or Specialty Practice • Institutional QI leadership • Online modules (PIMS) 	<p>Part IV²: ABP is enabling new pathways for pediatricians to claim Part IV QI credit for work they are already doing. These pathways are available to physicians who are engaged in QI projects alone or in groups and include a pathway for institutional leaders in quality to claim credit for their leadership.</p> <p>ABP is also allowing trainees (residents and fellows) to “bank” MOC credit for QI activities in which they participate. The pediatricians supervising these trainees also may claim MOC credit for qualifying projects.</p>
<p>Physical Medicine and Rehabilitation (ABPMR) abpmr.org</p>	<p>Part III: Computer-based secure exam administered at a proctored test center. Diplomates must pass the exam once every 10 years.</p> <p>Released MOC 100, a set of free practice questions pulled directly from the ABPMR exam question banks to help physicians prepare for the exam.</p> <p>There is a separate computer-based secure exam administered at a proctored test center that is required to maintain subspecialty certification.</p> <p><i>After the last administration of secure exam in 2020, the exam will be replaced with the Longitudinal Assessment for PM&R (LA-PM&R).</i></p>	<p>Part III¹: In 2020, the Longitudinal Assessment for PM&R (LA-PM&R) will be available for all diplomates:</p> <ul style="list-style-type: none"> • Diplomates receive 20 questions per quarter; after that: between 15 and 18 questions depending on performance (higher performance = fewer questions); • Maximum of 2 minutes to answer each question; • Diplomates can customize their question content; • Diplomates receive immediate feedback indicating whether the answer was correct or incorrect, followed by a critique; and • Available from a desktop or tablet (some features may not work on a phone’s web browser). <p>The ABPMR is exploring the use of longitudinal assessment for its subspecialty assessment requirement, but these plans, IT infrastructure, customer service support, and item banks take time to develop. More information on longitudinal assessment for subspecialties will be available in the next few years.</p>

	<p>Part IV²: Guided practice improvement projects are available through ABPMR. Diplomates must complete:</p> <ul style="list-style-type: none"> • Clinical module (review of one’s own patient charts on a specific topic), or • Feedback module (personal feedback from peers or patients regarding the diplomates clinical performance using questionnaires or surveys). <p>Each Module consists of three steps to complete within a 24-month period: initial assessment, identify and implement improvement, and reassessment.</p>	<p>Part IV²:ABPMR introduced several free tools to complete an IMP project, including: simplified and flexible template to document small improvements and educational videos, infographic, and enhanced web pages.</p> <p>ABPMR is seeking approval from the National Committee for Quality Assurance Patient-Centered Specialty Practice Recognition for Part IV IMP credit. ABPMR is also working with its specialty society to develop relevant registry-based QI activities.</p>
<p>Plastic Surgery (ABPS) abplasticsurgery.org</p>	<p>Part III: Computer-based secure exam administered at a proctored test center once a year (October). Diplomates must pass the exam once every 10 years.</p> <p>Modular exam to ensure relevance to practice.</p> <p>ABPS offers a Part III Study Guide with multiple choice question items derived from the same sources used for the exam.</p> <p>Part IV: ABPS provides Part IV credit for registry participation.</p> <p>ABPS also allows Part IV credit for IMP activities that a diplomate is engaged in through their hospital or institution. Diplomates are asked to input data from 10 cases from any single index procedure every 3 years, and ABPS provides feedback on diplomate data across five index procedures in four subspecialty areas.</p>	<p>Part III: In April 2020, the continuous certification exam will move to an internet-based testing format:</p> <ul style="list-style-type: none"> • Diplomate receives 30 questions per year; • Diplomates receive immediate feedback on answers with links to references and educational resources are offered with an opportunity to respond again; and • Available on any computer with an internet connection; <p>Part IV: Allowing MOC credit for IMP activities that a diplomate is engaged in through their hospital or institution.</p> <p>Physician participation in one of four options can satisfy the diplomate’s Practice Improvement Activity:</p> <ul style="list-style-type: none"> • Quality Improvement Publication • Quality Improvement Project • Registry Participation • Tracer Procedure Log
<p>Preventive Medicine (ABPM) theabpm.org</p>	<p>Part III: In-person, pencil-and-paper, secure exam administered at secure test facility. MOC exams follow the same content outline as the initial certification exam (without the core portion).</p> <p><i>In 2016, new multispecialty subspecialty of Addiction Medicine was established. In 2017, Addiction Medicine subspecialty certification exam was administered to diplomates of any of the 24 ABMS member boards who meet the eligibility requirements.</i></p>	<p>Part III: In 2019, the ABPM began offering all diplomates remotely-proctored MOC exams:</p> <ul style="list-style-type: none"> • Must be completed by the examinee in a single sitting; • Given in two 50-question sections with an optional 15-minute break between sections; • Diplomates are not allowed to consult outside resources or notes; • Results available on diplomate’s dashboard in the physician portal 4 weeks after the completion of the exam; and

		<ul style="list-style-type: none"> • Available on smart phone or computer. <p>In 2020, ABPM announced plans to offer a longitudinal assessment program for the Clinical Informatics subspecialty certificate starting in 2011.</p>
<p>Psychiatry and Neurology (ABPN) abpn.com</p>	<p>Part IV²: Diplomates must complete two IMP activities during each 10-year cycle. One of the activities must be completed through a Preventive Medicine specialty or subspecialty society (ACOEM, ACPM, AMIA, AsMA, or UHMS).</p> <p>Part III: Computer-based secure exam administered at a proctored test center. Diplomates must pass the exam once every 10 years.</p> <p>ABPN is developing MOC exams with committees of clinically active diplomates to ensure relevance to practice.</p> <p>ABPN is also enabling diplomates with multiple certificates to take all of their MOC exams at once and for a reduced fee.</p> <p>Grace period so that diplomates can retake the exam.</p>	<p>Part IV²: Partnering with specialty societies to design quality and performance improvement activities for diplomates with population-based clinical focus (i.e. Public Health).</p> <p>Part III: ABPN is implementing a Part III pilot program through 2021 to allow physicians to select 30-40 lifelong learning articles and demonstrate learning by high performance on the questions accompanying the article, to earn exemption from the 10-year MOC high-stakes exam.</p>
	<p>Part IV²: Diplomates satisfy the IMP requirement by completing one of the following:</p> <ol style="list-style-type: none"> 1) Clinical Module: Review of one’s own patient charts on a specific topic (diagnosis, types of treatment, etc.). 2) Feedback Module: Obtain personal feedback from either peers or patients regarding your own clinical performance using questionnaires or surveys. 	<p>Part IV²: ABPN is allowing Part IV credit for IMP and patient safety activities diplomates complete in their own institutions and professional societies, and those completed to fulfill state licensure requirements.</p> <p>Diplomates participating in registries, such as those being developed by the American Academy of Neurology and the American Psychiatric Association, can have 8 hours of required self-assessment CME waived.</p>

<p>Radiology (ABR) theabr.org</p>	<p>Part III: Computer-based secure modular exam administered at a proctored test center. Diplomates must pass the exam once every 10 years.</p> <p><i>The secure exam is needed only in limited situations.</i></p>	<p>Part III: An Online Longitudinal Assessment (OLA) model was implemented in place of the 10-year traditional exam. OLA includes modern and more relevant adult learning concepts to provide psychometrically valid sampling of the diplomate's knowledge.</p> <ul style="list-style-type: none"> • Diplomates must create a practice profile of the subspecialty areas that most closely fit what they do in practice, as they do now for the modular exams; • Diplomates will receive weekly emails with links to questions relevant to their registered practice profile. • Questions may be answered singly or, for a reasonable time, in small batches, in a limited amount of time. • Diplomates receive immediate feedback about questions answered correctly or incorrectly and will be presented with a rationale, critique of the answers and brief educational material. <p><i>Those who answer questions incorrectly will receive future questions on the same topic to gauge whether they have learned the material.</i></p>
	<p>Part IV²: Diplomates must complete at least one practice QI project or participatory QI activity in the previous 3 years at each MOC annual review. A project or activity may be conducted repeatedly or continuously to meet Part IV requirements.</p>	<p>Part IV²: ABR is automating data feeds from verified sources to minimize physician data reporting.</p> <p>ABR is also providing a template and education about QI to diplomates with solo or group projects.</p>
<p>Surgery (ABS) absurgery.org</p>	<p>Part III: Computer-based secure exam administered at a proctored test center. Diplomates must pass the exam once every 10 years.</p> <p>Transparent exam content, with outlines, available on the ABS website and regularly updated.</p> <p>ABS is coordinating with the American College of Surgeons and other organizations to ensure available study materials align with exam content.</p>	<p>Part III: In 2018, ABS began offering shorter, more frequent, open-book, modular, lower-stakes assessments required every 2 years in place of the high-stakes exam:</p> <ul style="list-style-type: none"> • Diplomates will select from four practice-related topics: general surgery, abdomen, alimentary tract, or breast; • More topics based on feedback from diplomates and surgical societies are being planned;

	<p><i>The secure exam is no longer offered for general surgery, vascular surgery, pediatric surgery, surgical critical care, or complex general surgical oncology.</i></p>	<ul style="list-style-type: none"> • Diplomates must answer 40 questions total (20 core surgery, 20 practice-related); • Open book with topics and references provided in advance; • Individual questions are untimed (with 2 weeks to complete); • Diplomate receives immediate feedback and results (two opportunities to answer a question correctly); and • Diplomates can use their own computer at a time and place of their choosing within the assessment window. <p>The new assessment is available for general surgery, vascular surgery, pediatric surgery, or surgical critical care with other ABS specialties launching over the next few years.</p>
	<p>Part IV²: ABS allows ongoing participation in a local, regional or national outcomes registry or quality assessment program, either individually or through the Diplomate’s institution. Diplomates must describe how they are meeting this requirement—no patient data is collected. The ABS audits a percentage of submitted forms each year.</p>	<p>Part IV²: ABS allows multiple options for registry participation, including individualized registries, to meet IMP requirements.</p>
<p>Thoracic Surgery (ABTS) abts.org</p>	<p>Part III: Remote, secure, computer-based exams can be taken any time (24/7) that the physician chooses during the assigned 2-month period (September-October) from their home or office. Diplomates must pass the exam once every 10 years.</p> <p>Modular exam, based on specialty, and presented in a self-assessment format with critiques and resources made available to diplomates.</p>	<p>Part III: ABTS developed a web-based self-assessment tool (SESATS) that includes all exam material, instant access to questions, critiques, abstracts and references.</p>
	<p>Part IV²: ABTS diplomates must complete at least one practice QI project within 2 years, prior to their 5-year and 10-year milestones. There are several pathways by which diplomates may meet these requirements: individual, group or institutional. A case summary and patient safety module must also be completed.</p>	<p>Part IV²: <i>No changes to report at this time.</i></p>

<p>Urology (ABU) abu.org</p>	<p>Part III: Computer-based secure exam administered at a proctored test center once a year (October). Diplomates must pass the exam once every 10 years.</p> <p>Clinical management emphasized on the exam. Questions are derived from the American Urological Association (AUA) Self-Assessment Study Program booklets from the past five years, AUA Guidelines, and AUA Updates.</p> <p>Diplomates required to take the 40-question core module on general urology and choose one of four 35-question content specific modules.</p> <p>ABU provides increased feedback to reinforce areas of knowledge deficiency.</p>	<p>Part III: ABU will continue the modular format for the Lifelong Learning knowledge assessment. The knowledge assessment portion of the Lifelong Learning program will not be used as a primary single metric that influences certificate status but rather to help the diplomate to identify those areas of strength versus weakness in their medical knowledge that is pertinent to their practice.</p> <p>The knowledge assessment is based on Criterion referencing, thus allowing the identification of two groups, those who unconditionally pass the knowledge assessment and those who are given a conditional pass. The group getting a conditional pass will consist of those individuals who score in the band of one standard error of measurement above the pass point down to the lowest score. That group would be required to complete additional CME in the areas where they demonstrate low scores. After completion of the designated CME activity, they would continue in the Lifelong Learning process and the condition of their pass would be lifted.</p>
	<p>Part IV²: Completion of Practice Assessment Protocols.</p> <p>ABU uses diplomate practice logs and diplomate billing code information to identify areas for potential performance or QI.</p>	<p>Part IV²: ABU allows credit for registry participation (i.e., participation in the MUSIC registry in Michigan, and the AUA AQUA registry).</p> <p>Another avenue to receive credit is participation in the ABMS multi-specialty portfolio program (this is more likely to be used by Diplomates who are part of a large health system, e.g. Kaiser, or those in academic practices).</p>

*The information in this table is sourced from ABMS Member Board websites and is current as of January 31, 2020.

¹Utilizing CertLink®, an ABMS web-based platform that leverages smart mobile technology to support the design, delivery, and evaluation of longitudinal assessment programs, some of which launched in 2017-2018. More information is available at: <https://www.abms.org/initiatives/certlink/member-board-certlink-programs/> (accessed 1-13-20).

²Participates in the ABMS Portfolio Program™ which offers an option for organizations to support physician involvement in quality, performance, and process improvement (QI/PI) initiatives at their institution and award physician IMP credit for continuing certification.

APPENDIX C:
ANNOTATED BIBLIOGRAPHY

Continuing Medical Education

Howard-McNatt M, Sabel M, Agnese D, et al. Maintenance of Certification and Continuing Medical Education: Are They Still Required? *Ann Surg Oncol.* 2019;26(12):3820-3823.

The authors believe that many surgeons may find the new recommendations for continuing medical education (CME) and maintenance of certification (MOC) confusing. For example, some wonder if they still need MOC, how much CME currently is required by the American Board of Surgery (ABS), and where MOC and CME credits can be obtained. This article reviews the current MOC and CME requirements and lists options for completion of these requisites available through the Society of Surgical Oncology and its official journal, *Annals of Surgical Oncology*. The ABS and the Society for Surgical Oncology aim for their members to have lifelong learning, with the goal of improving patient care.

Knowledge Assessments

Vandergrift JL, Gray BM. Physician Clinical Knowledge, Practice Infrastructure, and Quality of Care. *Am J Manag Care.* 2019;25(10):497-503.

A study was conducted to understand if and how one dimension of physician skill, clinical knowledge, as measured by performance on the American Board of Internal Medicine (ABIM) Maintenance of Certification (MOC) exam, moderates the relationship between practice infrastructure and the quality of diabetes or hypertension care among general internists. The study included 1301 physicians who certified in internal medicine between 1991 and 1993 or 2001 and 2003 and took the ABIM's MOC exam and completed ABIM's diabetes or hypertension registry during their 10-year recertification period between 2011 and 2014. The study showed that a physician's exam performance significantly moderated the association between practice infrastructure and care quality, and that physician skill, such as clinical knowledge, is important to translating patient-centered practice infrastructure into better care quality.

O'Neill TR, Newton WP, Brady JE, Spogen D. Using the Family Medicine Certification Longitudinal Assessment to Make Summative Decisions. *JABFM.* 2019;32:951-953.

This article reviews the Family Medicine Certification Longitudinal Assessment 1 (FMCLA) pilot launched by the American Board of Family Medicine (ABFM) on January 4, 2019. The ABFM hopes that FMCLA will provide both summative feedback—assessing whether a candidate has the cognitive expertise to be a board-certified family physician—as well as formative feedback—to help diplomates know more accurately what they do not know and, thus, focus their learning. The authors note that with respect to the formative component, early reports are very positive. Of the eligible diplomates, 71 percent took advantage of the pilot. The technology platform is functioning well. Very few diplomates have withdrawn, and many reported that the tool is helping them learn. Evaluation from this quarter and the next will begin to give the ABFM a better understanding of how FMCLA fits into the other ways diplomates learn, and the ABFM will explore new formats of reports to support diplomates' learning efforts.

Turner AL, Olmsted M, Smith AC, et al. Pediatrician Perspectives on Learning and Practice Change in the MOCA-Peds 2017 Pilot. *Pediatrics.* 2019;144(6). doi: 10.1542/peds.2019-2305.

Researchers found that nearly all (98 percent) of 5,081 pediatricians surveyed reported they "learned, refreshed, or enhanced their medical knowledge" because of MOCA-Peds. Of those participating pediatricians, 62 percent reported a practice change associated with pilot participation,

particularly for practice regarding ear, nose, and throat; well-child and preventive care; and mental and behavioral health.

Robinson, LR, Raddatz MM, Kinney, C. Evaluation of Longitudinal Assessment for use in Maintenance of Certification. *Am J Phys Med Rehabil.* 2019 Dec 5. doi: 10.1097/PHM.0000000000001359

This study evaluates a longitudinal assessment process (LA-PM&R) as a replacement for the American Board of Physical Medicine and Rehabilitation (ABPMR) MOC Examination. Design: In this quality improvement study, randomly selected ABPM&R diplomates were invited to participate in LA-PM&R. Participants' MOC scaled scores were compared to LA-PM&R non-participants. The ABPMR examined the association between LA-PM&R scores and MOC Scaled scores and performance on clone items placed on both examinations. The study showed that the LA-PM&R group scored higher on the MOC examination than the control group ($P < .05$). Performance on the 2 examinations was highly correlated, $r = .50$, $P < .0001$. On clone items, LA-PM&R participants had 74 percent correct on LA-PM&R but 86 percent correct on the MOC Examination ($P < .01$). This study indicates the LA-PM&R program leads to better learning and retention of information than the traditional 10-year summative multiple-choice examination and that it is a superior method of assessment for ongoing ABPMR certification. Based on these results, the ABPMR has adopted the LA-PM&R program to replace its MOC Examination – Part III in the four-part framework for maintenance of certification.

Stratman EJ. Dermatology Continuing Certification changes for the Better. *Dermatology News.* 2020;105(1):14-15.

This article discusses major changes to the American Board of Dermatology's (ABD) continuing board certification examination. On January 6, 2020, the ABD launched its new web-based longitudinal assessment program called CertLink®. This new platform is designed to eventually replace the sit-down, high-stakes, once-every-10-year medical knowledge examination that dermatologists take to remain board certified. With this alternative, every participating dermatologist will receive a batch of 13 web-based questions every quarter that he/she may answer at a convenient time and place. Questions are answered one at a time or in batches, depending on the test taker's preference, and can be completed on home or office computers (and eventually on smartphones). Participating in this type of testing will not require shutting down practice, traveling to a test center, or paying for expensive board review courses. CertLink® is designed to be convenient, affordable, and relevant to an individual's practice.

Rosenkrantz AB, Berland LL, Heitkamp DE, Duszak, Jr. R. Diagnostic Radiologists' Participation in the American Board of Radiology Maintenance of Certification Program. *AJR Am J Roentgenol.* 2019;213(6):1284-1290.

The purpose of this study was to characterize diagnostic radiologists' participation in the American Board of Radiology (ABR) MOC program, the framework for its new Online Longitudinal Assessment program. The study showed that although diagnostic radiologists with time-limited certificates nearly universally participate in MOC, those with lifetime certificates (particularly general radiologists and those in smaller and nonacademic practices) participate infrequently. Low rates of nonmandated participation may reflect diplomate dissatisfaction or negative perceptions about MOC.

Chesluk B, Gray B, Eden A, et al. "That Was Pretty Powerful": A Qualitative Study of What Physicians Learn When Preparing for Their Maintenance-of-Certification Exams. *J Gen Intern Med.* 2019;34(9):1790-1796.

The purpose of this study was to understand how maintenance of certification (MOC) exam preparation can affect knowledge and practice. The study included general physicians certified by

the American Board of Family Medicine (ABFM) and the American Board of Internal Medicine (ABIM) who had recently taken a joint ABFM/ABIM MOC exam. Out of the 80 physicians surveyed, 67 stated that during their MOC preparation they gained knowledge relevant to their practice. Sixty-three physicians gave concrete examples of how this new knowledge positively affected their practice. These examples are summarized in this article.

Chesluk BJ, Eden AR, Hansen ER, et al. How Physicians Prepare for Maintenance of Certification Exams: A Qualitative Study. *Academic Medicine. Acad Med.* 2019;94(12):1931-1938.

This qualitative study explores how physicians experience MOC exam preparation: how they prepare for the exams and decide what to study and how exam preparation compares with what they normally do to keep their medical knowledge current. The study showed that most interviewees studied for their MOC exams by varying from their routines for staying current with medical knowledge, both by engaging with a different scope of information and by adopting different study methods. Physicians described exam preparation as returning to a student/testing mindset, which some welcomed and others experienced negatively or with ambivalence. The authors concluded that what physicians choose to study bounds what they can learn from the MOC exam process and therefore also bounds potential improvements to their patient care. Knowing how physicians actually prepare, and how these preparation activities compare with what they do when not preparing for an exam, may inform debates over the value of requiring such exams, as well as conversations about how physicians, certification boards, and other key stakeholders in physicians' continuing professional development could improve the MOC process.

Gold L. Reflections Prompted by the Maintenance of Certification. *J Am Acad Psychiatry Law.* 2019;47(3):347-349.

In this editorial, the author describes her retreat to Bywater, Virginia to study for the American Board of Psychiatry and Neurology (ABPN) Forensic Psychiatry Maintenance of Certification (MOC) 10-year high-stakes examination. Although the author served on the ABPN Forensic Committee for 11 years, writing test questions for the Certification and MOC examinations, reviewing questions written by other people, helping to assemble tests (not this particular one), and reviewing test and question data, there was still a need to study for the exam to avoid the embarrassment of failing.

Poniatowski PA, Dugosh JW, Baranowski RA, et al. Incorporating Physician Input Into a Maintenance of Certification Examination: A Content Validity Tool. *Acad Med.* 2019 Sep;94(9):1369-1375.

As part of the American Board of Internal Medicine's (ABIM's) continuing effort to update its Maintenance of Certification (MOC) program, a content validity tool was used to conduct structured reviews of the MOC exam blueprints (i.e., tables of test specifications) by the physician community. Results from the Cardiovascular Disease MOC blueprint review are presented in this article as an example of the process ABIM conducted for several internal medicine disciplines. Responses from 441 review participants were analyzed. The blueprint review garnered valuable feedback from the physician community and provided new evidence for the content validity of the Cardiovascular Disease MOC exam.

Fain R, Newton WP, O'Neill TR. Creating a New Blueprint for ABFM Examinations. *Ann Fam Med.* 2019;17:562-564.

This report from the American Board of Family Medicine (ABFM) described efforts underway to develop a new blueprint for its examinations, including the Certification Examination, the In-Training Examination taken by residents, and longitudinal assessments.

Association between Continuous Certification and Practice Related Outcomes

Nyenhuis SM, Akkoyun E, Liu L, et al. Real-world Assessment of Asthma Control and Severity in Children, Adolescents, and Adults with Asthma: Relationships to Care Settings and Comorbidities. *J Allergy Clin Immunol Pract.* 2019 Nov 7. doi: 10.1016/j.jaip.2019.10.032

This article discusses Asthma IQ, developed by the American Academy of Allergy, Asthma, and Immunology, which was used to examine the rates and relative contributions of co-morbidities and care settings in terms of asthma severity and control among pediatric and adolescent/adult patients in a large national sample. This was the first time that patient data collected from Part IV of Maintenance of Certification (MOC) has been utilized to help understand the characteristics of patients in different care settings. The web-based Asthma IQ helps clinicians to: 1) use evidence-based medicine to make treatment decisions; 2) graph and report patients' asthma status over time; 3) analyze statistics for the asthma patients in their practice; and 4) report quality improvement measures for Pay for Performance and MOC.

Scott E, Downs S, Pottenger A, Saysana M. Quality Improvement Learning Collaborative Improves Timely Newborn Follow-Up Appointments. *Jt Comm J Qual Patient Saf.* 2019;45(12):808-813

A project involving 11 practices and 24 physicians with a goal to improve rates of timely newborn follow-up through a nine-month quality improvement learning collaborative (QILC) resulted in continual improvement in all measured newborn scheduling metrics throughout the nine-month learning collaborative, with sustainment of progress over the last three months of the QILC. Timely newborn follow-up was defined as an appointment scheduled within three days of newborn discharge. A valuable lesson learned from the QILC was the importance of tying quality improvement work to Part IV Maintenance of Certification (MOC). When surveyed at the end of the learning collaborative, participating pediatricians cited the availability of MOC Part IV credit from the American Board of Pediatrics as a major driver for participation.

Mathur M, Campbell S. Statewide Pediatric Quality Improvement Collaborative for HPV Vaccine Initiation. *WMJ.* 2019;118(1):42-43.

A study involving pediatricians participating in a quality improvement project, for which they received Maintenance of Certification (MOC) credit from the American Board of Pediatrics, resulted in improved human papillomavirus (HPV) vaccination rates at hospitals across Wisconsin. During the program's two-month intervention, the HPV vaccination initiation rates rose in participating practices from 56.4 percent to 71.2 percent, which exceeds state and national averages. In addition, Tdap vaccine initiation rates increased from 92.9 percent to 97.2 percent, and meningococcal vaccine rates increased from 89.7 percent to 92.8 percent. This study showed that a statewide learning collaborative can be a useful and productive way to improve the quality of care, and it is valued by the participants, particularly when MOC credit is awarded.

Willis TS, Yip T, Brown K, et al. Improved Teamwork and Implementation of Clinical Pathways in a Congenital Heart Surgery. *Pediatr Qual Saf.* 2019;4(e126):1-7.

A project to improve teamwork and decrease variations in care in a pediatric congenital heart surgery population by implementing Integrated Clinical Pathways (ICPs) on a foundation of teamwork training resulted in three of the four units experiencing a significant improvement in teamwork after training and coaching. The area without a significant change was one with high-level teamwork training already in place. ICPs were implemented in two patient subpopulations. There was a detected a decrease in total hours intubated using statistical process control charts in both of the ICP patient populations, but no reduction in length of stay in days. The infrastructure for the program was successfully implemented and remains in place six years later. This project

was approved for the quality improvement portion of Maintenance of Certification through the American Board of Pediatrics and was an incentive for participation.

Tew PW, Yard R. Improving Access to Screening, Brief Intervention, and Referral to Treatment in Primary Care for Adolescents: Implementation Considerations. The Center for Health Care Strategies. Available at: <https://www.chcs.org/media/SBIRT-BRIEF-101019.pdf> (accessed 1-22-20)

This article discusses how the University of Pittsburgh Medical Center (UPMC) Health Plan created a learning collaborative framework for engaging provider practices to participate in their Screening, Brief Intervention, and Referral to Treatment (SBIRT) initiative. SBIRT can be applied to various segments of the population to screen for risky substance use and provide early intervention when appropriate. Based on “The Model for Improvement,” their learning collaborative incorporated Plan-Do-Study-Act principles, which is a tool for documenting change. Two separate cohorts of practices participated in an initial training session, a mid-point, and a final convening. At the end of each cohort, UPMC saw screening rates of more than 95 percent in most practices and high rates of brief interventions for youth who screened positively for high-risk substance use. Providers reported positive feedback on the process and welcomed the support in developing their SBIRT workflow and reinforcing the use of MI. Outcomes of the collaborative included providing continuing medical education and/or maintenance of certification credits. By addressing these professional requirements, providers may be better able to justify the time out of the office. UPMC offered MOCs for their training, which requires a more intensive set-up process, and they determined that it added value beyond the more easily obtainable CMEs for their providers.

The Impact of Continuous Certification on Medical Licensure

Young A, Chaudhry HJ, Pei X, et al. FSMB Census of Licensed Physicians in the United States, 2018. *Journal of Medical Regulation*. 2019;105(2):7-23.

This article provides physician census data compiled by the Federation of State Medical Boards (FSMB). The article notes that there are 985,026 physicians with Doctor of Medicine (MD) and Doctor of Osteopathic Medicine (DO) degrees licensed to practice medicine in the United States and the District of Columbia. These qualified physicians graduated from 2,089 medical schools in 167 countries and are available to serve a U.S. national population of 327,167,434. While the percentage of physicians who are international medical graduates have remained relatively stable over the last eight years, the percentage of physicians who are women, possess a DO degree, have three or more licenses, or are graduates of a medical school in the Caribbean have increased by varying degrees during that same period. This report marks the fifth biennial physician census that the FSMB has published, highlighting key characteristics of the nation’s available physician workforce, including numbers of licensees by geographic region and state, type of medical degree, location of medical school, age, gender, specialty certification, and number of active licenses per physician.

Farrell ML. The Effect of State Medical Board Action on ABMS Specialty Board Certification. *Journal of Medical Regulation*. 2019;105(2):33-41.

In this article, the author discusses how state medical board action that is deemed a restriction by an American Board of Medical Specialties (ABMS) member board can result in a loss of board certification, impacting a physician’s ability to practice, and frustrating a medical board’s efforts to rehabilitate the physician and improve the quality of care provided to patients. State medical boards have difficulty predicting what types of actions constitute a restriction by a specialty board and imposing appropriate discipline because specialty boards use varying criteria to evaluate state medical board action. ABMS member boards experience frustration of their own when attempting

to interpret actions from 70 separate state medical boards, each governed by its own laws and using its own nomenclature. This article summarizes the inconsistency of both specialty boards and state medical boards, describes the efforts to resolve this issue, and proposes a series of steps that will bring a higher degree of predictability to this process and meet the needs of all stakeholders.

Nelson LS, Duhigg LM, Arnold GK, et al. The Association between Maintaining ABEM Certification and State Medical Board Disciplinary Actions. *J Emerg Med.* 2019 Dec;57(6):772-779.

A study was undertaken to determine if maintaining American Board of Emergency Medicine (ABEM) certification was associated with a lower risk of disciplinary action. This study which included 23,002 physicians in the study cohort showed that the absolute incidence of physicians with a disciplinary action was low (3.0 percent), and that maintaining ABEM certification was associated with a lower risk of state medical board disciplinary actions.

Nathan N. Regular Maintenance Is Strongly Recommended: The Road to Board Certification and Beyond. *Anesth Analg.* 2019;129(5):1191.

This infographic summarizes the educational pathway that leads to board certification in anesthesiology.

Zhou Y, Sun H, Macario A, et al. Association Between Participation and Performance in MOCA Minute and Actions Against the Medical Licenses of Anesthesiologists. *Anesth Analg.* 2019;129:1401-7.

A study to examine the association between participation and performance in the Maintenance of Certification in Anesthesiology (MOCA) Minute (the American Board of Anesthesiology's web-based longitudinal assessment) and disciplinary actions against medical licenses of anesthesiologists showed that both timely participation and meeting the performance standard in MOCA Minute are associated with a lower likelihood of being disciplined by a state medical board. Using 2016 data, the study found that the cumulative incidence of license actions was 1.2 percent in anesthesiologists required to register for MOCA Minute. Nonregistration was associated with a 2.93 percent higher incidence of license actions. For the 18,534 (96.2 percent) who registered, later registration (after June 30, 2016) was associated with a higher incidence of license actions.

Jones AT, Kopp JP, Malangoni MA. Recertification Exam Performance in General Surgery is Associated With Subsequent Loss of License Actions. *Ann Surg.* 2019 Apr 23. doi: 10.1097/SLA.0000000000003330

A study to measure associations between first-time performance on the American Board of Surgery (ABS) recertification exam with subsequent state medical licensing board disciplinary actions showed that failing the first recertification exam attempt was associated with a greater rate of subsequent loss-of-license actions.

Kinney CL, Raddatz MM, Sliwa JA, et al. Association of Participation in the American Board of Physical Medicine and Rehabilitation Maintenance of Certification Program and Physician Disciplinary Actions. *Am J Phys Med Rehabil.* 2019 Oct 18. doi: 10.1097/PHM.0000000000001331.

A study to analyze the relationship between participation in the American Board of Physical Medicine and Rehabilitation (ABPMR) maintenance of certification (MOC) program and the incidence of disciplinary actions by state medical boards over a physician's career showed that physicians in physical medicine and rehabilitation who had a lapse in completing ABPMR's MOC program had a 2.5-fold higher incidence of receiving a disciplinary action and had higher severity violations than physicians whose certificate never lapsed.

ABMS and ABMS Member Board Policies and Initiatives

Colenda CC, Scanlon WJ, Hawkins RE. Vision for the Future of Continuing Board Certification. *JAMA*. 2019 Jun 18;321(23):2279-2280..

This article provides an overview of the Vision Initiative process, the Commission's Final Report recommendations, and the American Board of Medical Specialties and ABMS member boards implementation program.

Bartley GB. The Vision for the Future Commission on Continuing Board Certification: Initial Perspectives from the American Board of Ophthalmology. *Ophthalmology*. 2019;126(7):922-925.

This article reviews the recommendations from the Continuing Board Certification: Vision for the Future Commission and discusses the implications of the Commission's report for the ophthalmic community.

Williams GA, Parke II DW. Continuing Professional Certification: Perspective of the American Academy of Ophthalmology. *Ophthalmology*. 2019;126(7):926-927.

This article reviews the recommendations from the Continuing Board Certification: Vision for the Future Commission and discusses the implications of the Commission's report for the ophthalmic community. The authors also provide background information on why the American Board of Ophthalmology (ABO) was established in 1916 and required certification based on examination at the initiation of clinical practice and subsequently established the continuing medical education (CME) system and the linkage of participation in accredited CME offerings with maintenance of state licensure and organizational credentialing

Newton WP, Baxley E, Lefebvre A. Improving Quality Improvement. *Ann Fam Med*. 2019;17:381-382.

In February 2019, the Vision Committee recommended that the American Board of Medical Specialties chart a new course for Improvement in Medical Practice. Arguing that the Maintenance of Certification requirement for Improvement in Medical Practice had become onerous for some diplomates and challenging to implement for many specialties, the Vision Committee called for the identification of new approaches to advancing practice while recognizing what Diplomates are already doing. This article discusses how the American Board of Family Medicine has begun to develop measures to better capture what is unique to family medicine and primary care, such as continuity, comprehensiveness, and patient centered outcomes.

Grayson MH, Oppenheimer J, Castells M, Nowak-Wegrzyn A. Life-long Learning and the ABAI: Practice Improvement Comes of Age. *Ann Allergy Asthma Immunol*. 2019 Jul;123(1):6-8.

This article discusses how the American Board of Allergy and Immunology (ABAI) developed "Alternatives to Practice Assessment/Quality Improvement Modules" to provide diplomates with opportunities to showcase the continual improvement activities they are involved in that apply to their specific career path.

Bradley J, Theobald M. Preliminary Results of the ABFM/STFM Precepting Performance Improvement Pilot. *Ann Fam Med*. 2019;17:185-186.

This article discusses how the Society of Teachers of Family Medicine and the American Board of Family Medicine completed a pilot program that offered Performance Improvement continuing certification credit (previously Maintenance of Certification Part IV) to ABFM diplomates who provide personal instruction, training, and supervision to a medical student or resident and who participate in a teaching improvement activity. Forty-two academic units (sponsors) were selected

to participate through an application process. Thirty-three completed the requirements of the program and submitted a final report.

Newton WP, Baxley E, Rode K, et al. Improving Continuing Education for Family Physicians: The Role of the American Board of Family Medicine. *JABFM*. 2019;32(5):756-8.

This article touches on the history of the American Board of Family Medicine (ABFM) and looks at the role the ABFM should play in the larger continuing medical education system for family physicians. At its founding, ABFM required reassessment of cognitive expertise every seven years. In the early 2000s, ABFM implemented a maintenance of certification model with requirements to participate in knowledge self-assessments and performance improvement activities every three years. The organization also extended time between examinations to every 10 years. Currently, the ABFM is offering an optional national Family Medicine Journal Club. This offering will provide practice changing articles selected for relevance and methodological rigor from 140 clinical journals to expand opportunities for ABFM, its chapters, and CME providers to develop continuing education opportunities to meet the needs of ABFM Diplomates.

Bass EB. Strengthening Our Voice in Public Policy on Medical Education. *Trans Am Clin Climatol Assoc*. 2019;130:156–165.

This article provides an overview of medical education issues that are receiving attention by public policymakers. Many forces contribute to the interest of policymakers in medical education, including public awareness of how policies can affect access to and quality of clinical care. Governmental legislatures are getting more involved in medical education policy, with less acceptance of the profession's autonomy. The author notes that professional societies are not positioned to respond optimally to governmental involvement in medical education policy due to limited resources, poor coordination, and competing concerns. In response to concerns of many physicians about maintenance of certification programs, policymakers at the state level have been asked to consider new policies for regulating the approach to maintenance of certification. At the federal level, policymakers have been asked to consider new ways to support the training of physician-investigators.

Nguyen XV, Adams SJ, Hobbs SK, et al. Radiologist as Lifelong Learner: Strategies for Ongoing Education. *Acad Radiol*. 2019 Aug;26(8):1120-1126.

The Association of University Radiologists-Radiology Research Alliance Lifelong Learning Task Force convened to explore the current status and future directions of lifelong learning in radiology and summarized its findings in this article. The authors review the various learning platforms and resources available to radiologists in their self-motivated and self-directed pursuit of lifelong learning. They also discuss the challenges and perceived barriers to lifelong learning and strategies to mitigate those barriers and optimize learning outcomes. The American Board of Radiology's maintenance of certification (MOC) program demonstrates the board's commitment and support for continuous quality improvement, quality patient care, and professional development. More recently, online longitudinal assessment has been introduced as a progressive online assessment that will replace the requirement of a MOC exam every 10 years.

Kates AM, Morris PB. Highlights of the American College of Cardiology Annual Scientific Sessions 2019. *Circulation*. 2019;139:2793-2795.

The authors provide an overview of the American College of Cardiology's (ACC) new strategic plan and announced the groundbreaking agreement between ACC and the American Board of Internal Medicine, establishing a new pathway for the maintenance of certification through the Collaborative Maintenance Pathway.

Shivraj P, Novak A, Aziz S, et al. The Certification Process Driving Patient Safety. *Obstet Gynecol Clin N Am.* 2019;46:269-280.

In 2016, the American Board of Medical Specialties (ABMS) and the National Patient Safety Foundation issued a joint call encouraging each ABMS member board to integrate patient safety principles and activities into their initial and continuous certification processes. This article describes how the American Board of Obstetrics and Gynecology integrates various aspects of patient safety principles into its initial and continuous certification processes. The authors first describe how they assess patient safety within their initial certification processes. They then describe each component of their maintenance of certification program, and how they intentionally embed patient safety principles within each component.

Physician Satisfaction with Continuous Certification

Peabody MR, Peterson LE, Dai M, et al. Motivation for Participation in the American Board of Family Medicine Certification Program. *FamMed.* 2019;51(9):728-36.

This study involving 7,545 family physicians who provide direct patient care and participate in continuing certification showed that approximately one-fifth (21.4 percent) were motivated to continue their board certification solely by intrinsic factors (e.g., to maintain professional image, personal preference, etc.). Less than one-fifth (17.3 percent) were motivated only by extrinsic factors (e.g., required by employers, for credentialing purposes, etc.), and the majority (61.2 percent) reported mixed motivations for continuing their board certification. Only 38 respondents (0.5 percent) included a negative opinion about the certification process in their open-text responses. Approximately half of family physicians in this sample noted a requirement to continue their certification, suggesting that there has been no significant increase in the requirements from employers, credentialing bodies, or insurers for physicians to continue board certification noted in previously cited work. Furthermore, only 17.5 percent of the physicians in this study reported solely external motivation to continue certification, indicating that real or perceived requirements are not the primary driver for most physicians to maintain certification.

Leslie LK, Turner AL, Smith AC, et al. Pediatrician Perspectives on Feasibility and Acceptability of the MOCA-Peds 2017 Pilot. *Pediatrics.* 2019;144(6). doi: 10.1542/peds.2019-2303.

This study involving 4,238 pediatricians who participated in MOCA-Peds showed that 93 percent considered MOCA-Peds to be a feasible and acceptable alternative to the traditional MOC exam. The pediatricians surveyed participated in a pilot MOCA-Peds program in 2017 and completed two questionnaires. Of the pediatricians who completed the fourth-quarter survey, 82 percent agreed the questions assessed clinical judgment, 82 percent agreed the questions were relevant to the practice of general pediatrics, and 59 percent agreed the questions were relevant to their specific practice setting. Most of them (89 percent) reported feeling less anxious about participating in MOCA-Peds than taking the proctored exam. The majority of general pediatricians and subspecialists (97 percent and 95 percent, respectively) said they planned to participate in MOCA-Peds to maintain their certification.

ABOS Web-Based Longitudinal Assessment (ABOS WLA). American Board of Orthopaedic Surgery. Available at: <https://www.abos.org/moc/abos-web-based-longitudinal-assessment-abos-wla/> (accessed 1-15-20)

In 2019, the American Board of Orthopaedic Surgery (ABOS) launched the ABOS Web-Based Longitudinal Assessment (ABOS WLA) Program. Nearly 10,000 Diplomates—about 55 percent of those eligible (diplomates whose certification expires 2019 through 2028)—chose to participate in the inaugural program. As the results of this ABOS survey demonstrate, the majority of ABOS Diplomates who participated in the ABOS WLA thought it was a high-quality program and want to

continue with it next year. Diplomates felt that the Knowledge Sources were relevant to their practice and a more appropriate assessment of their knowledge. ABOS' report of survey results includes a list of changes to next year's ABOS WLA based on diplomate feedback.

Dai M, Hagen M, Eden AR, Peterson LE. Physician opinions about American Board of Family Medicine self-assessment modules (2006 –2016). *J Am Board Fam Med.* 2019;32(1):79-88.

An evaluation of the American Board of Family Medicine (ABFM) diplomate feedback survey data to examine family physician opinions about ABFM self-assessment module (SAM) content (448,408 SAM feedback surveys were completed within the period 2006-2016) showed that family medicine diplomates generally value SAMs. Respondents felt that the SAM content is appropriate, and favorability ratings increased as diplomates engaged in more SAM activities.

Concerns about CBC

Singleton MM. Let's Put the Act in Activism. *Journal of American Physicians and Surgeons.* 2019;24(3):75-76.

In this editorial, the author discusses how the requirements of the federal government, insurers and managed care entities, large health care systems, state medical boards, medical specialty boards, and pharmaceutical companies are placing burdensome demands on physicians. In addition, the author notes that, "to apply for or renew hospital staff privileges, hospitals are demanding Maintenance of Certification (MOC), an expensive process of questionable value. MOC places onerous burdens on physicians and worse, takes away physicians' time with their patients. It is up to us to demand and maintain self-governance at the hospital and in our private practices."

Chazal RA. RESPONSE: Dealing With Multiple Certifications and Recertifications. *JACC.* 2019;73(11):1360-1361.

In this editorial, the author discusses concerns about the cost, time, and efficacy of multiple board certifications (and recertifications) that are widespread among trainees and practicing physicians. Limiting the number of board certifications that an individual pursues would seem logical, but it may be more practical for the practicing clinician than a trainee not yet certain of his or her career path.

Berlin J. Closing a Loophole: Medicine Works to Clarify MOC Law. *Texas Medicine.* Mar 2019. Available at: <https://www.texmed.org/Template.aspx?id=49952> (accessed 1-23-20).

This editorial discusses the 2017 Texas legislature's Senate Bill 1148 that prohibits health plans from using maintenance of certification (MOC) as a requirement for contracts; prevents the Texas Medical Board from using it as a condition of licensure or license renewal; and prohibits most hospitals and other health care facilities from using MOC status for credentialing, hiring, or retaining physicians. Exceptions include facilities required to use MOC by law, rule, or certification or accreditation standard; medical schools or comprehensive cancer centers; and entities in which the voting physician members of the medical staff vote to authorize the use of MOC. The Texas Medical Association (TMA) is working with lawmakers after receiving complaints that Memorial Hermann Health System is attempting to work around the law. TMA also supports the recommendations of the Vision for the Future Commission to strengthen the MOC reforms it proposed for the American Board of Medical Specialties (ABMS) and the ABMS member boards.

Challenges and Considerations

Cordovani L, Wong A, Monteiro S. Maintenance of certification for practicing physicians: a review of current challenges and considerations. *Canadian Medical Education Journal*. 2019. Available at: <http://www.cmej.ca>. Accessed December 16, 2019.

This paper reviews current issues and challenges associated with maintenance of certification (MOC) in medicine, including how to define medical competencies for practicing physicians, assessment, and how best to support physicians' lifelong learning in a continuous and self-motivated way. The authors discuss how the combination of self-monitoring, regular feedback, and peer support could improve self-assessment. They note that effective MOC programs are learner-driven, focused on everyday practice, and incorporate educational principles. They also discuss the importance of MOC to the physicians' actual practice to improve acceptability, the benefits of tailored programs, and decentralization of MOC programs to better characterize the physician's practice. Lastly, they discuss the value of simulation-based medical education in MOC programs. Simulation-based education could be used to practice uncommon complications, life-threatening scenarios, and non-technical skills improvement. This type of education can also be used to become proficient with new technology. As learners find simulation experiences educationally valuable, clinically relevant, and positive, simulation could be a way of increasing physicians' participation in MOC programs.

Gabel J, O'Dell T, Masuda E, et al. Who is treating venous disease in America today? *J Vasc Surg: Venous and Lym Dis*. 2019;7:610-614.

A study to examine the specialty, board certification, and training of physicians who are treating venous disease in the United States showed there are a large number of physicians treating venous disease who do not have an active board certification. This was more common for physicians employed by a large multistate venous corporation. Physicians employed by a corporation were more likely to advertise a board certification from the American Board of Venous and Lymphatic Medicine (a certification not endorsed by the American Board of Medical Specialties).

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