Moving in the Right Direction

ABA NEWS 2017
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### DESIGN & LAYOUT

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<td>Sasha A. Campbell, M.A.</td>
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We are nearing the final stretch of a five-year journey to fulfill the strategic goals we established in 2011 – to help anesthesiologists meet a higher standard and to broaden the impact of certification and Maintenance of Certification (MOC). We established these goals to address profound changes and challenges in healthcare, and as a result, we have dramatically changed our certification programs.

During the 2011 strategic planning process, the 12 physician directors on the Board determined that we wanted to help anesthesiologists meet a higher standard by integrating primary certification into the training process. We already had a rigorous certification program, but training was evolving. We wanted our process to complement the Accreditation Council of Graduate Medical Education’s (ACGME) movement toward competency-based training and promotion. We also wanted to encourage more sustained studying during training and to establish a model to assess physician communication and professionalism skills.

In 2014, we rolled out the staged examination system, which includes the BASIC, ADVANCED and APPLIED Exams. The BASIC and ADVANCED Examinations replaced the traditional Part 1 Exam. The APPLIED Examination, which in 2018 will include the Standardized Oral Examination (SOE) and the Objective Structured Clinical Examination (OSCE), will replace the traditional Part 2 Exam.

Our preliminary research indicates that we are meeting our goal of encouraging more sustained studying throughout training. Residents who took the BASIC Exam in July 2014 had a greater improvement on their In-Training Exam performance from their CA-1 to CA-2 year, compared to the preceding two cohorts in the traditional exam system. Similarly, the cohort entering their CA-1 year in 2014 had a greater improvement from their CB to CA-1 year, compared to the two preceding cohorts.

With the staged exams, we are increasing the rigor of our certification process, which supports our effort to advance the practice of anesthesiology by certifying the very best physicians.

In tandem with the staged exams development, we began conceptualizing the redesign of our Maintenance of Certification in Anesthesiology Program® (MOCA®) in 2011. We rolled out the initial program in 2004 in an effort to satisfy the American Board of Medical Specialties’ program requirements, but we believed we could do better. We wanted to incorporate technology and adult learning concepts to help diplomates demonstrate that they have the knowledge and skills to deliver high-quality care. We also wanted to be responsive to our diplomates’ feedback, which told us there were parts of the program that weren’t meeting their needs.

In 2016, we launched MOCA 2.0®. At the core of the new program is our longitudinal assessment known as MOCA Minute®, which we are piloting to replace the MOCA Exam. A study of the initial MOCA Minute pilot in 2014 showed diplomates who actively participated in the longitudinal assessment scored higher on the subsequent MOCA Exam than those who didn’t participate.

We expanded the MOCA Minute pilot in 2016 to create a more personalized approach to lifelong learning that provides diplomates with a meaningful tool to assess their knowledge and demonstrate proficiency.

In MOCA 2.0, we also restructured Part 4: Improvement in Medical Practice, adopting a point system and adding more activities that diplomates told us they were already doing to improve their practice.

In January, we launched MOCA 2.0 for diplomates with subspecialty certificates, and in the coming months, we will roll out new MOCA 2.0 features.

The feedback we’ve received from the vast majority of diplomates is that we are moving in the right direction. Diplomates have enthusiastically adopted MOCA Minute, some requesting that we allow them to answer more than the 120 questions (the current requirement) each year.

With that said, we’ve also received feedback that our program changes have been dizzying, leading to fatigue or confusion among some physicians. We’ve heard you. The good news is that most of the heavy lifting is done. We’ve constructed new paradigms for primary certification and MOC. Our new infrastructure will support our efforts to uphold the highest standards for our practice while giving us room to evolve to meet our diplomates’ needs in an ever-changing healthcare environment.

In the year ahead, we will carefully assess subspecialty certification to determine how we will position our programs to support our diplomates’ work. We will also
spend considerable time researching the impact of staged examinations and MOCA 2.0 on physicians’ knowledge acquisition and retention, and the quality of patient care.

During this time, we will seek your input to help guide the continuing evolution of our programs. We appreciate all of the feedback you’ve already provided us. You’ve taken surveys, participated in focus groups, served on user groups, called and emailed us. It has taken a collective effort to turn our strategic vision into our new reality. There is much more to be done. We hope you will continue to work with us to advance the highest standards of the practice of anesthesiology. Your continued engagement will keep us moving forward.

James P. Rathmell, M.D., President

Dr. Mark Keegan Elected to ABA Board

Mark T. Keegan, M.B., B.Ch.

We are excited to announce the election of our new director Mark T. Keegan, M.B., B.Ch. He officially began as the Board’s newest physician director in October 2016.

Dr. Keegan graduated from Trinity College Medical School in Dublin in 1992 and trained in anesthesia in 1995-96 at the MANCH hospital group, also in Dublin. He was certified in Internal Medicine by the Royal College of Physicians in Ireland.

Dr. Keegan completed his residency in anesthesiology in 1999 and his fellowship in critical care medicine in 2000 at the Mayo Clinic in Rochester, Minn. In 2011, he completed his master’s degree in clinical research at the Mayo Graduate School Clinical Research Training Program.

Dr. Keegan has remained at the Mayo Clinic since the completion of his training, and now serves as a professor of anesthesiology and consultant anesthesiologist and intensivist in the operating rooms and intensive care units.

He has been honored with the Mayo Brothers Distinguished Fellowship Award and multiple critical care clinician of the year and teacher of the year awards. Dr. Keegan has received the Mayo Critical Care Master Clinician and Master Educator Awards and has also twice been awarded the Mayo Department of Anesthesia Distinguished Clinician Award.

He holds ABA certification in anesthesiology (2001) and critical care medicine (2001) and participates in MOCA 2.0.

He lives in Rochester, Minn., with his wife and two children.

International Assessment Update

In 2013, we began offering a new examination, an international In-Training Examination (ITE-I) through the Academy of Medicine, Singapore, and have continued expanding the offering to include physicians training through the Kuwait Board of Anesthesia.

Last year, a total of 116 examinees from four anesthesiology training programs – one in Kuwait and three in Singapore – took the computer-based exam at the international agencies’ training sites. Our staff scored and reported the results to examinees through their sponsoring agency. We expect both Kuwait and Singapore to administer the ITE-I to their trainees again this year.
Last April, we launched a combined training program with the American Board of Emergency Medicine (ABEM) that enables physicians to fulfill the training requirements for certification in emergency medicine and anesthesiology. Johns Hopkins University in Baltimore was recently approved as the first residency program to offer the new six-year combined anesthesiology and emergency medicine training option.

All other residency programs who wish to offer this combined training must be approved by both boards before recruiting residents and must be accredited by and in good standing with the ACGME. Click here to view the program application form and other details.

Physicians can take the final certifying examinations in emergency medicine or anesthesiology when they have successfully completed all training requirements for both programs. To be eligible for dual certification, residents must satisfactorily complete 60 months of combined education that has been verified by both programs. If a combined program involves a four-year emergency medicine residency, the duration of training will increase to 72 months.

Residents who wish to be certified by the ABA will be required to take the new staged exams – the BASIC, ADVANCED, and APPLIED Examinations (both the Standard Oral Examination and the Objective Structured Clinical Examination components).

Our leadership began working with the ACGME in 2015 to create a single pathway for residency and fellowship training programs to report ACGME Milestones data to both organizations. In January 2016, we finalized a data-sharing agreement that eliminates duplicate reporting by training programs and provides the ABA and ACGME access to the data.

Training program representatives are still required to submit Certificate of Clinical Competence reports to the ABA; however; the section for reporting Milestones data has been removed from all of our reports. Programs will continue to report Milestones data to the ACGME based on their required deadlines.

The American Board of Medical Specialties (ABMS) is accepting applications for its 2017-2018 Visiting Scholars Program through midnight CT on May 1. The program, which debuted in 2016, promotes research and scholarship in areas related to board certification and MOC and exposes participants to the fields of professional assessment and education, quality improvement and regulatory policy. Physicians who are accepted for the one-year, part-time program will be notified in early July and will begin participating in September. Click here to learn more.

The ABMS works in collaboration with 24 medical specialty Member Boards to maintain the standards for physician certification and Maintenance of Certification.
Program Directors to Pilot Test OSCEs in 2017

Our Program Director meeting series continues this year in Raleigh, N.C., where we will share more details with training program directors about the OSCE component of the APPLIED Exam ahead of its 2018 implementation. During the one-day meetings, program directors will discuss the different scenario types – communication and professionalism skills, and technical skills – and will pilot test scenarios in the OSCE rooms of our Assessment Center.

Last year, nearly 100 residency program representatives attended meetings in Raleigh to learn more about the staged exams, including the BASIC Examination’s impact on residents taking the In-Training Examination, the standard-setting process for the BASIC and ADVANCED Examinations and the forthcoming launch of the OSCEs.

Residents: Tips for Creating Your Portal Account

Did you know that your portal account provides a single location to view and maintain all records associated with your ABA certification? To ensure you stay apprised of your status in the certification process, it is important that you create your portal account early in your training so you can track Board certification requirements, register for exams, view your exam scores and maintain your MOCA requirements.

HELPFUL TIPS:

• Use your personal email address (Gmail, Yahoo, etc.) so we can keep in touch with you after you complete your training program.

• Add our domain, “theaba.org,” to your email client’s safe senders list to minimize the risk of missing any of our emails.

• Check out instructions for “Creating a Portal Account,” which are available in the Quick Links section in the footer of our website.

• Verify and make any necessary updates to your email address, mailing address and other contact information each time you log into your portal account.
This year, we are launching the APPLIED Examination, the third and final exam in the staged exams process. Throughout 2017, the APPLIED Exam will only include the Standardized Oral Examination (SOE) component, which is identical to the traditional Part 2 (oral) Examination. The APPLIED Examination will be administered nine times this year.

In March 2018, we will complete the staged exams launch by adding the Objective Structured Clinical Examination (OSCE) component to the APPLIED Examination. Candidates who completed residency training between June 30 and Sept. 30, 2016, will not be required to take the OSCE component of the exam. However, candidates who completed residency training on or after Oct. 1, 2016 will be required to pass both the SOE and OSCE components of the APPLIED Examination to become board certified.

The OSCEs will focus on two domains that are difficult to assess using the current written or oral exam formats: communication and professionalism, and technical skills related to patient care. Beginning in 2018, candidates will complete a seven-station circuit that will evaluate their proficiency in seven of the skills listed in the expanded OSCE Content Outline.

Each OSCE encounter will be eight minutes long with four minutes between stations to review the next scenario. The OSCE portion of the APPLIED Exam will take 84 minutes from start to finish. Half of candidates will begin their APPLIED Examination with the SOE component, and the other half will begin with the OSCE component.

In some OSCE stations, candidates will interact with a standardized patient as part of the scenario. In others, they will interact directly with an examiner, but examiners will not be in most exam rooms. Instead, the sessions will be recorded and scored remotely. Click here to watch the OSCE Overview Video and here to read the OSCE FAQs.

More information is located on the APPLIED Exam Dates, Fees & Registration page of our website.

To be eligible to register for the APPLIED Examination, candidates must:

- have passed the ADVANCED Examination;
- be capable of performing independently the entire scope of anesthesiology practice without accommodation or with reasonable accommodation; and
- have satisfied the medical licensure requirement for certification by Nov. 15 of the exam administration year. Please note that training licenses do not fulfill this licensure requirement for certification.
This year, we will deploy two new features to MOCA 2.0 to enhance diplomates’ experience – a Personal Portfolio and search and explore functionality.

**Personal Portfolio**

The Personal Portfolio is a secure document bank where diplomates can upload important information, such as certificates issued by other ABMS Member Boards, medical school transcripts and CME certificates relevant to their MOCA 2.0 status. They can then send these documents electronically to credentialing entities and others who may request them, and can resend items easily from the Mailing History feature. Diplomates can also use the portfolio to track expirations dates for ABA certifications, medical licenses and other certifications that are time-sensitive.

The Personal Portfolio will be accessible through the Physician Portal. To help diplomates get started, we loaded all of their ABA certifications to a folder for them.

**Performance Summary/Search & Explore Feature**

Diplomates can review their MOCA Minute p-value performance from previous years in the certification summary section of their portal accounts. They will also soon be able to review an aggregate MOCA Minute performance summary in the same location. This information will directly relate to the new MOCA 2.0 “search and explore” feature, which is our next step in providing a personalized assessment and learning experience for diplomates.

Physicians’ MOCA Minute questions are based on the areas where they are certified and the practice areas they reported in their Practice Profile. As diplomates answer questions, they receive feedback on the areas in which they have knowledge gaps. The new search and explore feature will allow them to easily find CME activities that correlate to their gaps. Our goal is to help diplomates find CME that makes their learning more impactful and to help them fulfill their MOCA 2.0 requirements in a meaningful way.

We have partnered with the Accreditation Council for Continuing Medical Education to create a platform that provides our diplomates with a robust catalog of Category 1 CMEs they may complete for MOCA Part 2 credit.* The CME activities are tagged to our MOCA 2.0 Content Outline and are searchable based on topic area. MOCA Minute longitudinal assessment data will allow us to identify knowledge gaps that exist across the diplomate population that we can strategically help address.

We will notify diplomates when these new features launch. Both features will only be available to diplomates registered for MOCA 2.0.

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*The ABA has no financial relationship with CME providers and does not benefit financially from diplomates participation in CME activities. CME providers can submit their activities at no charge, and activity submission is in no way an ABA-endorsement of such activities.
More than 20,000 diplomates participated in the MOCA Minute pilot in 2016 to fulfill their MOCA Part 3: Knowledge, Judgment, and Skills requirement. The Board is piloting MOCA Minute to replace the once-every-10-year MOCA Exam. It provides diplomates with a dynamic tool that identifies where their knowledge is current and where there are gaps. Additionally, the Board is using it to evaluate whether diplomates continue to demonstrate they have the knowledge and skills required of a board-certified anesthesiologist.

We launched the MOCA Minute pilot in 2014 to help diplomates prepare for the MOCA Exam. In 2016, we expanded it to all diplomates registered for MOCA 2.0. Here’s what we learned in the first year of the expanded pilot:

The vast majority of diplomates met the MOCA Minute performance standard set by the Board, much the way they have with the traditional MOCA Exam. The Board of Directors, which consists of 12 practicing physician anesthesiologists and one public member, set the MOCA Minute performance standard in October 2016 when we had enough data to assess the performance of the entire participant cohort.

Given the innovative approach we are taking with this assessment, we had to find a new model to evaluate diplomate performance. We’re using Measurement Decision Theory (MDT), a statistical model that estimates the likelihood or probability that diplomates are keeping their knowledge up-to-date based on their pattern of responses to questions.

Many diplomates answered their quarterly MOCA Minute questions all at once; 30 at a time. Throughout 2016, we saw that many diplomates answered all 30 questions required per quarter in one sitting rather than spacing them out over three months. This fulfilled their obligation; however, diplomates may not have gotten the full benefit of the longitudinal assessment when they approached it this way.

That’s because the latest learning science research tells us that when questions are repeated at spaced intervals, individuals answering them will more effectively retain the information they’re reading over time. In more than 16 randomized trials, physicians improved long-term knowledge retention when they had to retrieve information from memory to answer questions over spaced intervals of time.1

Many diplomates have noted that there are a significant number of repeat questions in MOCA Minute. We designed the program to repeat questions or concepts to promote learning and knowledge retention. When diplomates answer all 30 questions at once, the questions are repeated in such close succession that individuals lose the benefits of spaced repetition.

In 2017, we will add more than 600 new MOCA Minute questions to the queue, which may increase the amount of time that passes before questions repeat. If diplomates limit their MOCA Minute consumption to about three questions a week and...
we continue to add new questions, diplomats should increasingly benefit from the spaced repetition.

**Diplomates told us MOCA Minutes served them well as an assessment tool; they prefer it to the traditional MOCA Exam.** Nearly 75 percent of diplomates who responded to the MOCA 2.0 survey in December reported that the longitudinal assessment served them somewhat or very well. Additionally, nearly 62 percent said the MOCA Minute experience is better or much better than their traditional MOCA Exam experience.

In 2017 and beyond, we will conduct ongoing research to determine the impact of MOCA Minute on diplomates’ knowledge acquisition and retention. The ultimate goal is to use the MOCA Minute pilot to identify knowledge gaps across the diplomate corps so that we can help fill the gaps to improve the quality of patient care across the spectrum of anesthesiology practice. We will keep you informed about what we learn.

**The vast majority of diplomates who are using the MOCA Minute mobile apps really like them.** Nearly 92 percent of the 2016 MOCA 2.0 survey respondents reported that they were somewhat or very satisfied with the Android and iPhone apps. We developed them to provide a convenient tool for diplomats who were often not in front of their computers, but might have idle time they could devote to the longitudinal assessment.

Many diplomates have embraced the app for its convenience, which allows them to answer questions on the go. However, some have told us that while they appreciate being able to answer questions with their children in their laps, while shopping or multitasking in some other way, they realized the value of finding a quiet time and space to answer their questions. They said they performed better when they allotted time to meaningfully participate in the assessment.


MOCA Minute®: There’s an App for That!

Did you know that there’s a MOCA Minute app that allows you to access your questions on the go? You can download the app from the Apple store or Google Play and begin answering questions immediately. You’ll log into the app on either platform with the same credentials you use for your portal account. You will need register for MOCA 2.0 to access MOCA Minute questions. Click here to watch a video on how the app works.
Diplomates have applauded the MOCA Minute pilot and other ABMS Member Boards have shown great interest in longitudinal assessment models based on the ABA’s experience. Inspired by MOCA Minute’s early success, several other Member Boards are launching similar initiatives.

ABMS announced the launch of CertLink™, its assessment platform, last year. CertLink is an online platform for the development and delivery of longitudinal assessments to support continuing certification and professional development.

Several Member Boards are using CertLink or plan to use it to design, deliver and evaluate their own longitudinal assessment pilots. Participating Member Boards include the American Board of Colon and Rectal Surgery, American Board of Dermatology, American Board of Medical Genetics and Genomics, American Board of Nuclear Medicine, American Board of Ophthalmology, American Board of Otolaryngology, American Board of Pathology and the American Board of Physical Medicine and Rehabilitation. The first CertLink-supported pilots are set to launch in 2017.

Additionally, the American Board of Pediatrics (ABP) and American Board of Radiology (ABR) are also engaged in similar pilots. The ABP launched its pilot, known as MOCA-Peds, in January. The ABP pilot features multiple-choice questions delivered to pediatricians on a quarterly basis with immediate feedback and content tailored to diplomates’ individual areas of practice.

The ABR is preparing for a late 2018 launch of its online longitudinal assessment pilot to select diplomates. Based on the pilot feedback, modifications and completion, the ABR anticipates a full launch for all of its diplomates possibly in mid-2019.

Now that we have pioneered the concept of longitudinal assessment as a part of Maintenance of Certification, we look forward to learning also from the experience of these other Member Boards to further improve our programs.

Diplomate Voice: William B. McIlvaine Jr., M.D.

Dr. McIlvaine shares what he believes is the value of board certification. He is a general and pediatric anesthesiologist in private practice in Texas, as well as a non-time limited certificate holder who participates in MOCA 2.0. Dr. McIlvaine has served as an ABA examiner for 25 years.

“Patients need to care about board certification because we set a standard and maintain that standard over the duration of a career. I’m one of the people still left in the system who has a certificate that is not time-limited. When that change came in 2000, it really made a difference in the motivation of physician anesthesiologists to continue engaging in the academic pursuits in the learning, the growing, the developing and changing that is required of a physician. If you look at the way that medical knowledge has evolved over the past few years – that 10 percent of our knowledge is new every year or 10 percent of it is outdated every year – that means that within five to 10 years, everything that you thought you knew has been expanded or wrong or thrown out. If you’re not engaged in these kinds of activities, you might be doing an ok job, but you’re not doing the best job. And I think patients have the right to expect the best.”
We invited more than 21,000 diplomates to participate in a MOCA 2.0 survey in December 2016 to gauge their experience and perceptions of the redesigned program. Thirty-nine percent of diplomates completed the survey, providing more than 13,000 comments about the registration process, MOCA Minute, MOCA Part 4 and the value of the ABA and board certification.

The comments generally reflected that many diplomates:

- value the ABA and board certification;
- are frustrated by frequent changes to the MOCA requirements;
- prefer the MOCA Minute experience to the 10-year MOCA Exam;
- are appreciative that we have been responsive to their concerns; and
- want evidence that MOCA impacts physician quality.

Here are additional highlights from the survey that the Board of Directors, 12 clinically active physicians and one public member, will consider as they continue to evolve the program:

Nearly 51 percent of diplomates understand the MOCA requirements somewhat (38 percent) or completely (13 percent); 26 percent do not understand them well. This presents an opportunity for us to provide more education to diplomates. One important point to note is that there is just one set of requirements that diplomates will now need to meet regardless of how many certificates they are maintaining. We will send customized communications to diplomates each year so they understand what requirements they’ve completed and which ones are outstanding. Diplomates may also review their progress report in their portal at any time to retrieve this information.

We enhanced the portal this year to include information about diplomates’ status as “Participating in MOC” or “Not Participating in MOC,” making this information more readily available. Diplomates are currently listed in the Diplomate/Candidate Directory as “Not participating in MOC” if they fail to complete their MOCA requirements on time. Diplomates can remain certified while “not participating in MOCA” until their certificate expires. Diplomates whose certificates expire will not earn a new certification until all MOCA requirements are met.

Diplomates believe Parts 3 (70 percent) and 4 (77 percent) of the program are the most challenging to understand. We encourage diplomates to review the videos on the MOCA Minute page of our website, including those that explain how we set the MOCA Minute standard and how diplomates can make the best use of the tool.

Additionally, we will soon add examples of Part 4 activities to our website to provide greater clarity on what constitutes an acceptable submission. There are also videos, PDFs and other materials on the Part 4 page of our website that may provide guidance.

Sixty-one percent of diplomates are very interested and 34 percent are somewhat interested in an online tool that will link them to relevant CME. This year, we will launch a new search and explore tool designed to guide diplomates to CME related to their knowledge gaps.

Sixty-two percent of diplomates said their MOCA Minute experience was much better or better than their MOCA Exam experience. MOCA Minute is serving most diplomates very (32 percent) or somewhat well (43 percent) as an assessment tool, although many diplomates said they wanted us to provide an aggregate MOCA Minute performance summary that identifies their knowledge gaps. We are working on creating these reports for distribution to diplomates.

Sixty-three percent of diplomates often review the MOCA Minute feedback page, which provides the correct answer, a brief explanation and links to additional learning resources. However, 55 percent do not often click on the learning resources and 40 percent do not refer to their question history. Many diplomates said they weren’t aware of the question history, which is not available in the MOCA Minute mobile app. The question history, which is available in the MOCA Minute portal or via diplomates’ progress report (in the Part 3 section), allows physicians to review specific questions and see how their responses compared to their peers.

Thirty percent of diplomates report that the new Part 4 options are significantly better (10 percent) or somewhat better (20 percent) than the former options. However, 51 percent said they were not yet familiar with the new options. We will continue to provide diplomates with useful information to guide them through their Part 4 activities.

We recognize that there are still opportunities to improve Part 4. The Board of Directors will spend the next year or more working on additional enhancements. We hope to engage diplomates in this process through focus groups and other venues where we can learn what approaches they think would be most effective to demonstrate quality clinical practice.

Diplomates can also share their feedback at any time via the MOCA feedback mailbox. We will continue to share details about what we are hearing and what discussions the Board of Directors is having to continuously improve MOCA.
In January, we launched the second phase of MOCA 2.0, which includes diplomates maintaining subspecialty certificates. All diplomates who register for MOCA 2.0 now have one set of program requirements, independent of how many certificates they are maintaining. For instance, diplomates only need to complete 250 Category 1 CME credits to fulfill their MOCA 2.0 Part 2 requirement for all of the certificates they are maintaining.

Diplomates certified in anesthesiology, critical care medicine, pain medicine and pediatric anesthesiology will participate in the MOCA Minute pilot to fulfill the MOCA 2.0 Part 3: Assessment of Knowledge, Judgment, and Skills requirement. They will answer 30 questions per calendar quarter (120 by 11:59 p.m. ET Dec. 31 each year) based on the areas in which they are certified and the practice areas they reported in their Practice Profile. The MOCA Minute questions are geared toward physicians’ subspecialties and the knowledge every board-certified diplomate should have.

MOCA Minute questions are based on the certificates diplomates are maintaining.

- **If you are only maintaining your anesthesiology certification**, you will answer general anesthesia questions that represent the base of knowledge every anesthesiologist should know.

  Additionally, questions will be based on the areas of practice you selected in your Practice Profile during the registration process and on areas of new knowledge we believe diplomates need to learn quickly. You can update your practice profile at any time by clicking on “Modify Practice Profile” in the Part 3 section of your MOCA 2.0 Progress Report.

  Diplomates will pay a $210 annual fee for the first certificate maintained (typically the primary certification) and an additional $100 annual fee for each subsequent certificate maintained. For example, a diplomate maintaining anesthesiology ($210), pain medicine ($100) and critical care medicine certificates ($100) will annually pay $410.

  Visit the [MOCA for Subspecialties page](https://www.abanet.org/moca/subspecialties) of our website for more information, including a recorded webinar and FAQs.

**Subspecialty Recertification Update**

Beginning this year, diplomates whose subspecialty certificates expire in 2017 or later will participate in MOCA 2.0 to maintain their certificates, and those certified in pain medicine, critical care medicine and pediatric anesthesiology will participate in MOCA Minute instead of taking a recertification exam. However, physicians whose critical care medicine or pain medicine subspecialty certification expired on or before Dec. 31, 2016, must pass a subspecialty recertification examination in 2017 or 2018 before they can register for MOCA 2.0.

The 2017 Pain Medicine Recertification Examination will be administered Sept. 9 - 23, and the 2017 Critical Care Medicine Recertification Examination will be administered Oct. 14 - 18. Registration for both exams opened March 1.

To avoid a late fee, register by June 29. Late registration is available with an additional $500 fee until Aug. 10 for the Pain Medicine Recertification Examination and until Sept. 14 for the Critical Care Medicine Recertification Examination.

If physicians with expired subspecialty certificates do not pass the recertification exam by the end of 2018, they will be required to reestablish eligibility for entrance into the initial subspecialty certification examination system and pass the initial subspecialty certification exam within seven years of registration. Physicians will only be allowed to reestablish their eligibility once. For more details, please see the [Subspecialty Policy Book](https://www.abanet.org/moca/policies).
PRIMARY CERTIFICATION IN ANESTHESIOLOGY

The success rates on the Part 1/ADVANCED and Part 2 Examinations for candidates who took the exams for the first time are shown in the following table.

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Part 1/ADVANCED</td>
<td>88%</td>
<td>87%</td>
<td>88%</td>
<td>87%</td>
<td>90%</td>
<td>91%</td>
<td>93%</td>
</tr>
<tr>
<td>Part 2</td>
<td>84%</td>
<td>86%</td>
<td>86%</td>
<td>88%</td>
<td>88%</td>
<td>87%</td>
<td>90%</td>
</tr>
</tbody>
</table>

*The ADVANCED Examination was first administered in July 2016. The pass rate for the 1,560 candidates who took the ADVANCED Exam for the first time is 94 percent, and the pass rate for the 73 candidates who took the Part 1 Exam for the first time was 71%.

The Part 1/ADVANCED and Part 2 Examination success rates for the entire candidate group are displayed below:

*The pass rate for the 2016 Part 1 and ADVANCED Exam was 71% and 94%, respectively.

We have certified 56,325 physicians in anesthesiology as of Dec. 31, 2016. The certification rate for physicians who completed their anesthesia residency between 2009 and 2014 is displayed below:

MAINTENANCE OF CERTIFICATION IN ANESTHESIOLOGY PROGRAM® (MOCA®)

The MOCA Examination (formerly Cognitive Examination) was administered for the first time in 2005. (We are piloting MOCA Minute to replace the exam as the Part 3: Assessment of Knowledge, Judgment, and Skills.) The success rate has typically been greater than 90 percent from 2005 to 2016. A total of 7,483 diplomates have successfully completed the MOCA program as of Dec. 31, 2016.
CRITICAL CARE MEDICINE (CCM) CERTIFICATION

The success rates on recent CCM Examinations are:

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate</td>
<td>97%</td>
<td>97%</td>
<td>84%</td>
<td>86%</td>
<td>80%</td>
<td>77%</td>
<td>94%</td>
</tr>
</tbody>
</table>

We have certified 2,153 diplomates in CCM since the program’s inception in 1986.

Qualified diplomates of other ABMS Member Boards take the same CCM Exam and are held to the same passing standard as our diplomates. For these examinees, the 2016 success rate was 100 percent.

CRITICAL CARE MEDICINE (CCM) RECERTIFICATION

We initiated a voluntary CCM recertification program in 2001, and 209 diplomates have recertified in the subspecialty. The overall success rate on the CCM Recertification Exam from 2001 - 2016 is 68 percent.

PAIN MEDICINE (PM) CERTIFICATION

The success rates on recent PM Examinations are:

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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate</td>
<td>90%</td>
<td>80%</td>
<td>86%</td>
<td>87%</td>
<td>85%</td>
<td>89%</td>
<td>88%</td>
</tr>
</tbody>
</table>

Since the inception of the program in 1993, we have issued 5,757 PM certificates.

Qualified diplomates of other ABMS Member Boards take the same PM Exam and are held to the same passing standard as our diplomates. For these examinees, the 2016 success rate was 87 percent.

PAIN MEDICINE (PM) RECERTIFICATION

All ABA certificates in pain medicine are time-limited. We have recertified 2,413 diplomates in the subspecialty since beginning a PM recertification program in 2000. The overall pass rate on the PM Recertification Exam from 2000 to 2016 is 84 percent.

PEDIATRIC ANESTHESIOLOGY (PA) CERTIFICATION

The success rates on the PA Examinations are:

<table>
<thead>
<tr>
<th>Year</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate</td>
<td>96%</td>
<td>89%</td>
<td>82%</td>
<td>83%</td>
</tr>
</tbody>
</table>

All ABA certificates in pediatric anesthesiology are time-limited. The PA Examination was administered for the first time in 2013. A total of 3,059 diplomates have been certified in the subspecialty. In 2016, 395 diplomates took the PA Examination and 326 (83 percent) earned certification.

HOSPICE & PALLIATIVE MEDICINE (HPM) CERTIFICATION

The HPM Examination is administered by the ABIM every other year (even years). We have certified 125 diplomates in hospice and palliative medicine since the program’s inception in 2008. All ABA HPM certificates are time-limited. The success rates on these exams are shown below.
*The HPM Exam, administered by the ABIM, had a small population of ABA candidates and a high proportion of re-takers in 2014, making the pass rate significantly lower than in previous years.

HOSPICE & PALLIATIVE MEDICINE (HPM) RECERTIFICATION

We offered the HPM Recertification Examination for the first time in 2016, and one diplomate recertified in the subspecialty.

SLEEP MEDICINE (SM) CERTIFICATION

The SM Examination is administered by the ABIM every other year (odd years). All ABA SM certificates are time-limited. We have certified 13 diplomates in SM since its inception in 2011. The success rates on these exams are shown below.

*The SM Exam, administered by the ABIM, had a small population of ABA candidates and a high proportion of re-takers in 2015, making the pass rate significantly lower than in previous years.

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<thead>
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</thead>
<tbody>
<tr>
<td>Pass Rate</td>
<td>86%</td>
<td>74%</td>
<td>79%</td>
<td>40%</td>
<td>53%</td>
</tr>
</tbody>
</table>

NEW EXAM OPTION FOR DIPLOMATES SEEKING STATE Licensure

Diplomates who need to establish that they have passed a secure, medical-knowledge exam within the last 10 years to gain a state medical license can now take our Anesthesiology Special Purpose Examination (ASPEX). The ASPEX, which focuses on anesthesiology-specific medical knowledge, will be available beginning March 1 for $800 per application. The exam will be delivered on-demand through Pearson VUE centers nationwide.

Visit the ASPEX page of our website for more information.

ABA Keeps Exam Fees Same for Fifth Straight Year

Our 2017 and 2018 fees will again remain at 2012 levels. As we revise our current assessment programs and develop new initiatives, we do not build these costs into our registration fees. We’ve moved several processes in-house, including exam development and scoring and the Part 2 and APPLIED Examination administration, to offset costs of the transition to staged exams and MOCA 2.0.

Registration fees are based solely on the recurring annual cost to administer and maintain our assessment programs. We encourage physicians to register for our exams by the standard registration deadline to take advantage of the lowest fee; however, a late registration period is available for an additional $500 fee. For more information on fees by exam, please click on Exams on our website at www.theABA.org and select a specific exam page.

### Examination Type Fees

<table>
<thead>
<tr>
<th>Examination Type</th>
<th>Standard Registration Fee</th>
<th>Late Registration Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part 1</td>
<td>$1,550</td>
<td>$2,050</td>
</tr>
<tr>
<td>Part 2</td>
<td>$2,100</td>
<td>N/A</td>
</tr>
<tr>
<td>BASIC</td>
<td>$755</td>
<td>$1,275</td>
</tr>
<tr>
<td>ADVANCED</td>
<td>$755</td>
<td>$1,275</td>
</tr>
<tr>
<td>APPLIED</td>
<td>$2,100</td>
<td>N/A</td>
</tr>
<tr>
<td>Subspecialty certification</td>
<td>$1,600</td>
<td>$2,100</td>
</tr>
<tr>
<td>Subspecialty Recertification</td>
<td>$1,600</td>
<td>$2,100</td>
</tr>
</tbody>
</table>
ABA Implements More Video Communications

Our Marketing and Communications team began using videos in 2014 to help communicate changes we’ve made to our assessment programs, illustrate specific procedural details and highlight diplomate achievements.

The most-watched videos of 2016 focused on the launch of MOCA 2.0, MOCA Minute and Measurement Decision Theory (MDT), but we also engaged residents and training program faculty with an OSCE overview video to provide details before the component’s 2018 launch.

In addition, we began capturing commentary from our volunteers about the value of board certification, how their leadership roles within the medical community impact patient care and why patients should care about certification.

<table>
<thead>
<tr>
<th>Most-Watched Videos</th>
<th>Number of Views</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOCA 2.0 Registration Overview</td>
<td>7,668</td>
</tr>
<tr>
<td>MOCA Part 4 Overview</td>
<td>4,214</td>
</tr>
<tr>
<td>What is MDT?</td>
<td>2,261</td>
</tr>
<tr>
<td>OSCE Overview</td>
<td>1,564</td>
</tr>
<tr>
<td>Why MOCA Minute?</td>
<td>962</td>
</tr>
<tr>
<td>Getting the Most Out of MOCA Minute</td>
<td>968</td>
</tr>
</tbody>
</table>

ABA Social Media Channels Growing Steadily

In early 2016, our Marketing and Communications team launched two social media channels - a Facebook page (@AmericanBoardAnesthesiology) and a Twitter handle (@ABAPhysicians) - to create new ways to engage and connect with our diplomates, patients and others in the healthcare community.

To date, we have reached nearly 80,000 people and have nearly 400 followers on Facebook. Our Twitter feed has gained more than 90,000 impressions and nearly 350 followers.

Visitors have used the social media pages to show support for featured physicians and diplomates and reach out to staff with questions and feedback on initiatives. The most popular feature across both social media platforms has been the Director Spotlight, which highlights our actively practicing physician directors and provides information on their roles within the Board and the medical community. Visitors also enjoyed posts that feature images of their physician peers.

In the future, we will continue to highlight our programmatic initiatives, volunteers’ service and commentary from diplomates about the value of board certification. We also encourage candidates, diplomates and training programs to share their news and clinical photos with us on social media and at coms@theABA.org so we can proudly display how you’re advancing the practice of anesthesiology and enhancing patient care.
The 2017 editions of our Policy Books, which provide a comprehensive description of all of our assessment program policies, are now available on the Policies page of our website. The books are divided into four publications by topic to help our residents, candidates, diplomates and training programs find the policies that are relevant to them.

The following list highlights new policies and substantive changes in 2017:

**Staged Exams (BASIC, ADVANCED and APPLIED Exams)**
- Details are provided about the launch of the APPLIED Exam, which will only include the SOE component in 2017.
- Exam logistics and details are provided about the OSCE component of the APPLIED Exam, which will launch in 2018.
- Physicians must now attest to their clinical activity every three years while in the exam system.
- Physicians who graduate from an American Osteopathic Association-approved anesthesiology residency program in the United States or its territories on or after the date the program receives full accreditation by the ACGME will receive ABA credit for their CA 1-3 years of satisfactory training in the newly accredited program.

**Maintenance of Certification in Anesthesiology Program (MOCA®)**
- Details are provided about the MOCA Minute pilot program standard.
- Revised reestablishing eligibility for primary certification status for physicians whose MOCA participation exceeds 13 years in one cycle.
  - Time-limited certificate holders must take and pass the ADVANCED Exam and both the SOE and OSCE components of the APPLIED Exam within seven years of the last day of the year in which their ADVANCED Exam registration was accepted.
  - Non-time limited certificate holders (certified before 2000) must take and pass the MOCA Exam before they will be allowed to fulfill their remaining MOCA program requirements.
- Details are provided about the January 2017 launch of MOCA 2.0 for diplomates with subspecialty certificates.
  - Diplomates who are maintaining more than one certificate will only have one set of MOCA 2.0 requirements.

**Primary Certification in Anesthesiology (Traditional Part 1 and Part 2 Exams)**
- Physicians must now attest to their clinical activity every three years while in the exam system.
- Details are provided about Part 2 Exam week change request and cancellation policies.
  - Candidates who have not been assigned an exam date, time and location may request to change their Part 2 Exam week; however, we cannot guarantee that a change will be made. To request a change, candidates must send a written request to our office with a check for the change fee. Current fees are posted on the Traditional Part 2 Dates, Fees & Registration page of our website.
  - Candidates who have been assigned an exam date, time and location may not request to change their Part 2 Exam week. If they do not plan to attend their scheduled exam, they must cancel their exam.
- Revised reestablishing eligibility for primary certification status for candidates who do not attain certification within the seven year duration of candidate status policy period. They must take and pass the BASIC Exam to re-enter the exam system for primary certification. After doing so, they must pass the ADVANCED Exam and both the SOE and OSCE components of the APPLIED Exam by Dec. 31 of the fourth year following their successful completion of the BASIC Exam.

**Subspecialty Certification and Recertification**
- Diplomates whose certificates expired in 2016 must pass the recertification exam before they can register for MOCA 2.0. They may take an exam one time each year through 2018 and may register for the 2017 exams beginning on March 1.

Click on the image above to go to the policy books.
The journal Anesthesiology published an ABA study in its October 2016 issue that found that active voluntary participation in MOCA Minute was independently associated with subsequent improved performance on the MOCA Exam. The study is titled, “Association between Participation in an Intensive Longitudinal Assessment Program and Performance on a Cognitive Examination in the Maintenance of Certification in Anesthesiology” (DOI: 10.1097/ALN.0000000000001301).

Prior to 2016, the MOCA program required physicians to pass a cognitive examination once every 10 years. As part of our effort to make MOCA more relevant and personalized for our diplomates, we began a pilot in 2014 of MOCA Minute, a web-based intensive longitudinal assessment program that leverages recent advances in learning science and technology to promote learning. We conducted an observational study to evaluate the effectiveness of the pilot, which resulted in the recent publication.

In the 2014 MOCA Minute pilot, diplomates received one question per week via email on topics the majority of diplomates did not perform well on in previous MOCA exams. They had one minute to answer the question once it was accessed. The correct answer, a rationale and a link to additional resource materials were displayed on a subsequent screen, regardless of whether the question was answered correctly or incorrectly.

We invited diplomates who were eligible to take the July 2014 MOCA Cognitive Examination to enroll in the pilot voluntarily, and approximately half opted to participate. The study compared how those enrolled in MOCA Minute performed on the MOCA Cognitive Examination with those who did not enroll in the pilot.

In the first phase of the study, 1,408 (50 percent) of 2,800 diplomates who were eligible to take the July 2014 exam enrolled in the pilot. Among 616 diplomates who took the July 2014 exam as their first attempt, the exam score was higher for those who passed the primary certification Part 1 and Part 2 Exams on their first attempt, for male anesthesiologists, for American medical school graduates and for younger anesthesiologists. Controlling for these covariates in the multiple regression, those who actively participated in the MOCA Minute (i.e., answered 10 or more questions) scored 9.9 points (95 percent CI 0.8-18.9) higher than those who were not enrolled, based on the 185 items not related to the MOCA Minute topics. Very similar results were observed in the second phase of the study, which examined the performance on the January 2015 exam by an additional 684 diplomates.

The MOCA Minute program features spaced study, frequent assessment with information retrieval, interleaving topics and immediate feedback with targeted learning resources, which all potentially benefit adult learners. This study provides evidence that the MOCA Minute approach helps diplomates increase their fund of knowledge and remain current in areas important to clinical practice. Participation in MOCA Minute was opened up to all diplomates participating in MOCA in 2016 and is being piloting to replace the MOCA Exam.
ABA/MGH study finds resident clinical performance & ABA oral exam scores

The study “Clinical Performance Scores Are Independently Associated with the American Board of Anesthesiology Certification Examination Scores” was published in the June 2016 issue of Anesthesia & Analgesia (DOI: 10.1213/ANE.0000000000001288). It examined the question of whether performance on our written and oral exams is related to clinical performance scores during residency.

The oral exam is designed to assess candidates’ ability to exercise sound judgment in clinical decision making and management of surgical and anesthetic complications, appropriately apply scientific principles to clinical problems, adapt to unexpected changes in clinical situations, and logically organize and effectively present information.

The analysis included 107 Massachusetts General Hospital residency graduates from 2009 to 2013 who had at least one attempt of the written and oral exams. Resident clinical performance was assessed using “relative to peers” scale Z-scores ($Z_{rel}$), which contains the assessment components for each of the six ACGME core competencies given by supervising faculty members during their third clinical anesthesia year. The first-time written ($Z_{part1}$) and oral ($Z_{part2}$) exam scores were standardized to Z-scores relative to the national calibration groups.

The bivariate correlations between $Z_{rel}$, $Z_{part1}$, and $Z_{part2}$ were all statistically significant. Using multiple regression, we found that clinical performance scores and ABA written exam scores each independently contribute to ABA oral exam scores, accounting for 4.5 percent (95% CI 0.5%-12.4%) and 20.8 percent (95% CI 8.0%-37.2%) of the variance of the oral exam scores respectively.

This analysis showed that residents with higher clinical performance scores during the last year of their residency are more likely to achieve higher oral board exam scores, even when accounting for their performance on the written exam. These results suggest that the oral exam is assessing factors that are important to clinical performance and that are not completely assessed in a written exam. This is an important argument for the validity of our oral exam.

ABA Ongoing Research Initiatives

Our Research Committee continues its active agenda to evaluate and validate our assessment programs, and to investigate the value of board certification and maintenance of certification to clinicians and the public.

In a recent study, we collaborated with the Federation of State Medical Boards to determine whether performance on the written and oral exams for primary certification in anesthesiology predicts which anesthesiologists will have actions taken against their medical licenses. This retrospective cohort study included 49,278 physicians who entered anesthesiology training from 1971 to 2011.

Males had higher incident rate of medical license actions than females. After controlling for gender and medical school graduation country, compared to those who passed both our written and oral examinations on first attempt, those who passed both exams but required more than one attempt for one or both exams had modestly higher risk of license actions.

Physicians who were unable to pass the oral examination had a substantially higher rate of license actions. This study provides evidence that our oral examination assesses the domains that are important to how anesthesiologists perform, but are not fully captured by the written examination. It also shows that ABA-certified anesthesiologists are markedly less likely to have pronounced performance deficiencies resulting in medical license actions than non-certified anesthesiologists. This is an example of how the Committee continues to generate the evidence needed to evaluate and improve our programs. We will continue our research so future iterations of the MOCA 2.0 program and MOCA Minute pilot can be guided by the best available evidence.

The Committee also conducts research to help program directors and others involved in residency training. In 2013, we initiated a longitudinal survey project to understand anesthesiologists’ medical training, residency life, career plans and physician well-being. We annually administer surveys to physicians at all levels of training, starting with anesthesiology residents in the CA-1 year. This year, we will include those who have recently graduated and are in practice. These survey results provide great insight into residents’ experience, and we regularly share this information with program directors.

The Committee is also continuing its research into how substance use disorder affects residents and anesthesiologists in practice. Such research is a part of our efforts to generate knowledge that will help diplomates succeed throughout their careers.
Please stop by our exhibit booths this year to ask questions about your specific certification or MOCA requirements and view your progress in your portal account. We welcome the opportunity to share information with you and collect your feedback on the changes we’ve made to our assessment programs. For additional information, please visit the Exhibit Booths page of our website.

### 2017 EXHIBIT BOOTHS:

<table>
<thead>
<tr>
<th>Society for Pediatric Anesthesiology</th>
<th>Florida Society of Anesthesiologists</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austin</td>
<td>Palm Beach, Fla.</td>
</tr>
<tr>
<td>March 3-5</td>
<td>June 9-11</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>American Society of Regional Anesthesia and Pain Medicine</th>
<th>Society for Pediatric Anesthesiology</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Francisco</td>
<td>Boston</td>
</tr>
<tr>
<td>April 6-8</td>
<td>Oct. 20</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Society of Critical Care Anesthesiologists</th>
<th>American Society of Anesthesiologists*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington</td>
<td>Boston</td>
</tr>
<tr>
<td>May 5</td>
<td>Oct. 21-25</td>
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</tbody>
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<table>
<thead>
<tr>
<th>International Anesthesia Research Society</th>
<th>New York State Society of Anesthesiologists</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington</td>
<td>New York</td>
</tr>
<tr>
<td>May 6-9</td>
<td>Dec. 8-11</td>
</tr>
</tbody>
</table>

*Physician Directors will lead a Q&A forum to provide information and answer attendees’ questions about our assessment programs and requirements. The date and time will be posted on our website when it is available.*
ADVANCED Examination Senior Editors
James W. Heitz, M.D.
David L. Hepner, M.D.
Peggy P. McNaull, M.D.
Sachin H. Mehta, M.D.
Jill M. Mhyre, M.D.
Paul S. Pagel, M.D.
Keith Ruskin, M.D.
Richard W. Stypula, Jr, M.D.
Michael H. Wall, M.D.

BASIC Examination Committee
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Jerome M. Klafta, M.D.
Roger S. Mecca, M.D.
L. Lazarre Ogden, III, M.D.
Manuel C. Pardo, Jr, M.D.

BASIC Examination Junior Editors
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Sivasenthil Arumugam, M.B., B.S.
Emily Baird, M.D.
S. Patrick Bender, M.D.
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Christopher W. Connor, M.D., Ph.D.
Melissa Davidson, M.D.
Lilithfern, M.D.
Richard E. Galgon, M.D.
Harold J. Gelfand, M.D.
David B. Gluck, M.D.
Jordan E. Goldhammer, M.D.
Kevin W. Hatton, M.D.
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Victor L. Mandoff, M.B., B.S.
Suzanne K. W. Mankowitz, M.D.
Kenneth R. Moran, M.D.
David R. Moss, M.D.
Kevin Ng, M.D.
Krishna Parekh, M.D.
Emily E. Peoples, M.D.
Stephanie A. Rayos, M.D.
William B. Smith, M.D.
Astrid G. Stucke, M.D.
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• Labor Day
• Veterans Day
• Thanksgiving Day
• Day after Thanksgiving
• Christmas Eve
• Christmas Day
• New Year’s Eve