



ENGAGEMENT AND ACTION

2018
ANNUAL
REPORT



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Leadership Update

From the start, the National Board of Medical Examiners® (NBME®) has held steadfast to its purpose, continuing in our service to the public and to health professionals by providing trusted, evidence-based, and state-of-the-art assessment. All along, we have responded to the ever-changing needs of the healthcare community by improving what we do and how we do it—sometimes with small, incremental changes, and at other times with great leaps forward.

In the context of today's healthcare environment, I'd argue that the latter is imperative. We are engaged and taking action. For NBME, that means collaboratively working with our partners to rethink how we approach assessment, advancing validation, and supporting the continuous learning needs of health professionals.

In 2018, we continued to evolve discussions with our stakeholders and peer organizations. We listened more closely to create new testing capabilities, including customized assessment enhancements that will soon meet specific needs in medical education. We broadened and deepened relationships with peer organizations, pursuing more improvements to measure non-cognitive skills and workplace-based assessment.

As a co-sponsor and co-parent of the United States Medical Licensing Examination® (USMLE®), we joined with the Federation of State Medical Boards and others to initiate an important conversation about scoring and the primary and secondary purposes of assessment within undergraduate and graduate medical education. We look forward to advancing this discussion in the months ahead.

During the same period, we also turned our attention to refining our strategy and investment in infrastructure—both processes and technologies—to accelerate our response to the changing needs of the medical community. Our staff embraced the NBME Way with a commitment to continuous improvement and reducing business costs. Simultaneously, we diligently worked to further our strategic plan and execute on important operational changes.

I encourage you to read about these and other exciting advancements in this annual report, with more accomplishments detailed online at NBME.org. With all of these changes underway, NBME will continue to create value and be a resource for health professionals throughout their education, ongoing training, and careers.



Peter J. Katsufarakis, MD, MBA, *President and Chief Executive Officer*

Letter from the Chair

It's been my great privilege to serve as NBME Board Chair over these past nearly four years. As a healthcare professional committed to continuous improvement, I marvel at how our talented team—with open minds and great enthusiasm—is effectively driving the evolution of NBME.

Every day, our work reminds us of the complexity of the healthcare industry. The true north of NBME's mission and the dedication of our people help navigate the dizzying array of challenges that new approaches to medical education, practice, and policy bring to what we do.

Together, we've launched significant organizational changes—from the NBME Way to Vision 2030—that have compelled us to embrace new ways of thinking and action to ensure NBME thrives and continues to deliver value to today's health professionals. We are all stewards of this important work.

Throughout this transformative period, our President and CEO, Peter J. Katsufarakis, and our leadership team, in collaboration with our many partners, have led a significant shift in thinking about healthcare assessments. We are boldly expanding from a place of who is qualified to practice to how health professionals improve their skills. Our part in assessment and development of workplace-based assessment has set the stage for more innovation and services that advance continuous learning.

The evolution of NBME would not be possible without our partners. From the NBME Invitational Conference for Educators to the Pediatrics Milestones Assessment Collaborative Research Study and from our conversation about USMLE scoring to our international work in Kazakhstan, Brazil, and Panama, our relationships with organizations and individuals advance medical education assessment in the United States and globally. And our work would not be progressing without the many volunteers who tirelessly give their best to help us develop the most trusted, reliable healthcare assessment tools available.

Nelson Mandela said, "Education is the most powerful weapon which you can use to change the world." How true that is, especially for health professionals who put their knowledge to the test every day. As I step down as Board Chair, I am proud of the role NBME plays in supporting our journey to be the very best.



Suzanne T. Anderson, *NBME Chair*





BUILT ON COLLABORATION

Our core business is energized by collaboration. Through continued partnerships with health professions education and licensing organizations, we're at the forefront of advancing high-quality healthcare assessment, moving beyond who is qualified to practice to how health professionals improve their skills. Here are the highlights of our many fruitful partnerships and collaborative efforts in 2018.

Feedback Drives Enhancements to USMLE

In 2018, the USMLE program's continuous improvement strategy harnessed feedback from stakeholders to yield new and improved approaches to engagement, transparency, and examinee communications. To that end, outreach efforts to increase dialogue and listen to input included stakeholders representing a broad spectrum of medical education (undergraduate and graduate), state medical boards, examinees, the "house of medicine," and the public for a national discussion about USMLE numeric score reporting.

USMLE examinee score reports were redesigned based on examinee feedback and additional input. The redesigned report features a chart showing an examinee's performance compared with recent first-time takers from US and Canadian medical schools, the examinee's performance in individual content areas relative to their overall Step examination performance, and information about the allocation of items across each content area.

The USMLE program continues to devote considerable effort to ensuring that test committee members represent the content areas required for medical practice as well as the realities of clinical practice. As a result, those USMLE test committee members constitute a "national faculty" of medicine drawn from medical schools and clinical practice settings across the United States. More information about committee training and composition is available on [page 30](#).

Improving Student Experience Through USMLE Medical Student and Resident Advisory Panel

In an effort to broaden its outreach, colleagues from the USMLE program hosted the first meeting of the Medical Student and Resident Advisory Panel to the USMLE program. The meeting, facilitated by staff from NBME and the Federation of State Medical Boards (FSMB), aimed to:

- Collect feedback from medical students and residents on issues and topics specific to USMLE
- Test assumptions about the USMLE with an examinee audience
- Gain insight into the perspectives of examinees on USMLE policy issues



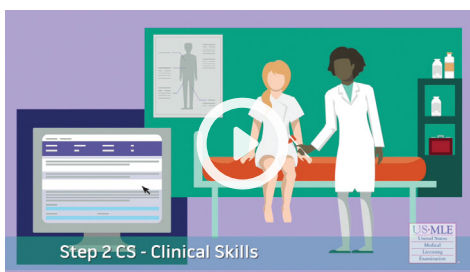


Staff engaged with the participants about their experience of what is working well and what could be improved. The discussion covered topics such as the USMLE website, test day experience, fairness/transparency, engagement with stakeholders, the application process, exam design, and scores. One panel suggestion was that USMLE develop informational and orientation materials for schools to provide a more consistent introduction to the program.



At the inaugural meeting of the USMLE Medical Student and Resident Advisory Panel, our primary objective was to listen, not tell. We knew we had the right people in the room.”

Michael Barone, MD, MPH, Vice President, Licensure, NBME



New videos answer examinees' frequent questions: **“Who is USMLE?”** and how it works in **“Your USMLE Journey to Medical Licensure in the US.”**

View the videos at [USMLE.org](https://www.usmle.org).

Kick-Starting a Conversation on USMLE Scoring with InCUS

Late last year, NBME—together with the American Medical Association, the Association of American Medical Colleges, the Educational Commission for Foreign Medical Graduates, and the FSMB—issued an invitation to leaders from some of the nation’s key medical education and medical regulatory organizations to discuss a complex issue: USMLE numeric score reporting and score use by primary and secondary users within undergraduate and graduate medical education. In early March 2019, the Invitational Conference on USMLE Scoring (InCUS) convened in Philadelphia to discuss viewpoints and explore potential solutions. Recommendations on the primary and secondary uses of USMLE numeric score reporting will be made in the months ahead. [More information about InCUS](#) is available at [USMLE.org](https://www.usmle.org).

Engaging with the Coalition for Physician Accountability

In September 2018, NBME again participated in the Coalition for Physician Accountability discussions and collaboration on matters of common relevance to improve the quality of healthcare. Through this forum, NBME engages with peer organizations to delve into issues impacting the continuum of physician education, training, and practice. At this session, the role of artificial intelligence and its impact on the practice of medicine had application for everyone attending. The challenges and opportunities with interprofessional education was another rich topic of conversation among participants.



Medical Regulators Share Ideas and Experiences

In October, the International Association of Medical Regulatory Authorities' (IAMRA) hosted its 2018 International Conference on Medical Regulation and included NBME leaders. Energized by its Empowering Regulation with Innovation and Evidence theme, NBME's Dr. Miguel Paniagua, FACP, participated on the Research and Education Working Group, one of IAMRA's objectives for its 2017-2018 Strategic Plan.

Staff also joined the Research and Education Working Group, chaired by Dr. Tebogo Kgosietsile Solomon Letlape, president of the Health Professions Council of South Africa.

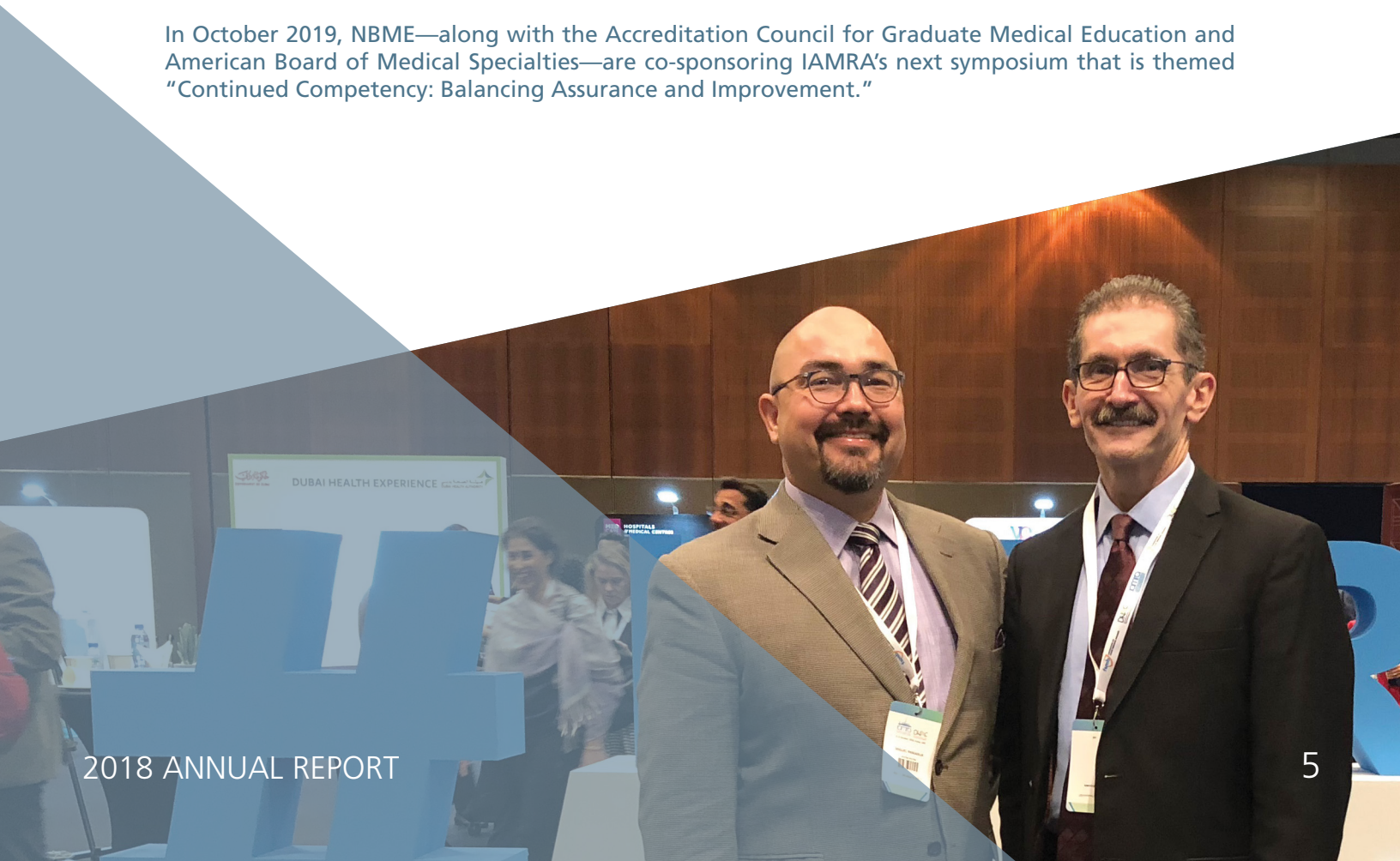
The IAMRA interactions provided an opportunity for medical and health regulators, policy makers, and academics to come together and share ideas and experiences. Subthemes of the conference included innovative regulatory models, medical workforce, safe practice and quality, and medical education.



One of IAMRA's ongoing goals is to support and encourage members to develop mechanisms for assuring the continued competency of doctors. This symposium will build on preceding meetings and strives to bring together members from around the world who have been on the continued competency journey for some time as well as those just starting out."

Dr. Tebogo Kgosietsile Solomon Letlape, Chair, IAMRA

In October 2019, NBME—along with the Accreditation Council for Graduate Medical Education and American Board of Medical Specialties—are co-sponsoring IAMRA's next symposium that is themed "Continued Competency: Balancing Assurance and Improvement."





**>30 ITEM WRITING
WORKSHOPS FOR
MEDICAL EDUCATORS**

Faculty Learn About Medical Education Assessment Science

NBME recognizes that the extraordinary commitment and dedication of its stakeholders and volunteers have contributed to the success of our programs and services, and helped advance our mission. We created the Strategic Educators Enhancement Fund (SEEF) and the Executive Board-appointed SEEF Oversight Committee to design and provide opportunities of value to the medical education community. Through SEEF, NBME is delivering opportunities of value to the community from which our volunteer force derives.

In 2018, SEEF enabled the launch of the inaugural NBME Invitational Conference for Educators. The conference was designed for educators who are new to medical education assessment science. Participants learned techniques and best practices for school-based assessment through a series of hands-on workshops. A similar customized educator's training session will convene again in May 2019.



The NBME Invitational Conference for Educators is a wonderful opportunity to give something back to the individuals and institutions that have helped NBME. It also allows us to listen to and learn from the participating faculty.”

Elizabeth Azari, Senior Vice President, Operations, NBME



MEDICAL EDUCATORS TRAINED IN 2018



Nearly 1,000 Health and Wellness Coaches Sit for Exam

The International Consortium for Health & Wellness Coaching (ICHWC) and NBME first piloted an assessment that tests knowledge of core competencies for health and wellness coaches in 2017. Last year, 990 coaches participated in the exam in two sessions. There are more than 1,800 National Board Certified Health & Wellness Coaches (NBC-HWC), practicing across healthcare, employee wellness programs, and in the private and public sectors.

The credential enables those certified to provide evidence of their expertise and quality as competent health and wellness coaches. It also allows healthcare professionals, patients, employers, and educators to identify practitioners who have demonstrated knowledge, skills, and abilities essential to effective health and wellness coaching.

Partnership to Create New Suite of Supports for National Diabetes Prevention Program

In early 2019, it was announced that with funding from the Centers for Disease Control and Prevention, ICHWC is partnering with the American College of Preventive Medicine to develop group coaching competencies, a training program, and a certificate examination that supports wide dissemination of the National Diabetes Prevention Program (National DPP) lifestyle change program.

NBME staff will also participate and lend their expertise in producing high-quality certification examinations. This collaboration marks the beginning of a multiyear concerted effort to improve the skills of lifestyle coaches and the outcomes of the National DPP.



The collaboration between NBME and ICHWC provides an opportunity to draw upon the unique capabilities of each of the organizations to provide high-quality assessments for health and wellness coaches.”

Aggie Butler, PHD, Vice President, Domestic Programs, NBME

NAVLE Collaboration Yields Milestone Successes

NBME and the International Council for Veterinary Assessment (ICVA) worked together to make the necessary changes to implement the new North American Veterinary Licensing Examination (NAVLE) blueprint. The blueprint is based on the completed veterinary practice analysis that defines the knowledge and skills essential for competent practice. Joint accomplishments include:

- Recoded NAVLE item bank to the relevant competencies for practice
- Revised score reports to reflect competencies
- Presented upcoming changes to NAVLE at national meetings, including the session of the Association of American Veterinary Medical Colleges
- Presented NAVLE orientation to licensing boards at the annual meeting of the American Association of Veterinary State Boards

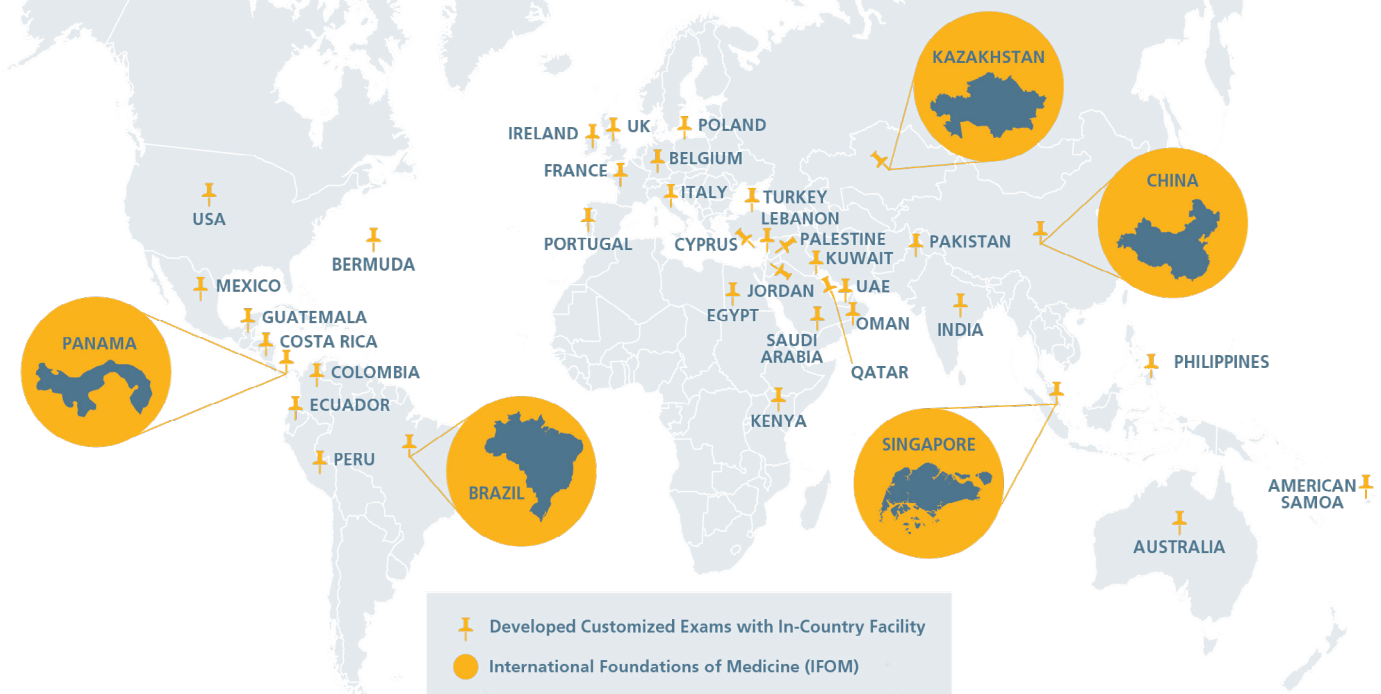


≈6,000 NORTH AMERICAN
VETERINARY LICENSING EXAMS
ADMINISTERED IN 2018

NBME Global Partnerships and Collaborations Continue to Work Toward Better Exams

Our international work has proven the value that partnerships and collaborations with organizations in other parts of the world have brought to improving health assessment. Over the past year, dedicated NBME professionals worked with medical schools, governments, and professional associations to help improve global healthcare education through assessment.

 **26 COUNTRIES**
USE NBME PROGRAMS





FAIMER and NBME Further Efforts to Create Global Medical Education Assessment Learning Opportunities

In May 2018, NBME and the Foundation for Advancement of International Medical Education and Research (FAIMER®), signed a memorandum of understanding that outlines the terms of the new collaboration effort. We agreed to:

1. Identify international opportunities for collaboration in the areas of assessment, faculty development, and educational research
2. Increase assessment knowledge and skills of faculty and staff of international medical schools or regulatory bodies around the world by conducting workshops, educational courses, and research
3. Make the FAIMER and NBME networks, as appropriate, available to test ideas, conduct research, locate collaborators, and promote the joint work of the organizations

Since then, the organizations have been working to develop the framework for an assessment institute that would be modeled after the FAIMER Institute concept. The goal of the proposed International Assessment Institute (IAI) is to create a degree-granting program that would introduce faculty of health professions schools to:

- the principles of assessment
- methods to write quality test questions
- aligning assessments with new curriculum methods
- psychometrics
- the importance of assessment to health profession education

The IAI program would be a joint initiative between NBME, FAIMER, and the Universidade do Minho (University of Minho) in Braga, Portugal. The organizations are working together to develop the curriculum. This curriculum must be approved through the university's accreditation process with the objective of having the first cohort of students begin in September 2020.

Kazakhstan

Since 2014, NBME has worked with Kazakhstan's Center for Knowledge and Skills Assessment on a World Bank-funded effort to establish a licensure and certification framework for Kazakh health specialists. In 2018, the Ministry of Healthcare approved the creation of the National Center for Independent Examination (NCIE) to work with NBME over a five-year period. As part of this collaboration, a pilot of both the International Foundations of Medicine (IFOM) Basic Science and Clinical Science exams was administered last September. This was the first time students of Central





Asian medical schools were exposed to international standards of high-level examinations. A larger, Russian-language administration of the exams is underway this year.



One of the priority tasks of the state program for the development of health in the Republic of Kazakhstan is to ensure the quality training of medical personnel. Within the framework of the state task of the Ministry of Health, NCIE, together with our partner, NBME—the world leader in the assessment of practitioners—conducted the first IFOM exam in Central Asian countries. The students in our medical schools were given a unique opportunity to get acquainted with the international standards of high-level examinations. It also permitted us to conduct analysis with the IFOM international comparison group and the USMLE standards.”

Gulmira Zhangereyeva, MD, PHD, Director, National Center for Independent Examination

Brazil

Three Qualifications in Medicine exams, jointly developed by faculty from Brazilian Medical Schools and NBME, are administered in Brazil. Last year, all students from schools in the state of São Paulo as well as schools outside the state took the Qualifications in Medicine 1 (QM1) (basic science knowledge of third-year students) and QM2 (clinical knowledge of fifth-year students) exams. The third examination, QMR, is used for residency selection. There is growing interest in using the exam throughout the country. Our collaborators at the Hospital Sírio-Libanês were instrumental in making this happen.

Panama

In Panama, NBME has worked with the Republic of Panama Ministry of Health and the University of Panama School of Medicine to administer the residency selection exam since 2002. Beginning in 2018, the tests were administered twice annually, in February and July.

Portugal

NBME collaborated with the Portuguese Medical Association to create a Residency Selection Examination (RSE) for Portugal. We are working with representatives of the Portuguese Medical Association—the Selection Committee (Gabinete de Prova Nacional de Acesso [GPNA])—to coordinate the implementation of a new model of the RSE and the professionalization of the assessment process in Portugal. Staff has conducted Item Writing Workshops for the GPNA representatives and, over time, the GPNA representatives will lead the work of creating new items annually for the RSE. The updated RSE was administered by GPNA in November 2018.



Saudi Arabia

NBME has begun a collaboration with the Saudi Commission for Health Specialties to provide support and training for psychometric staff of the Commission. Commission staff visited NBME for a week of item writing training in early 2018.

NBME Joins with AMA Consortium to Ready Students for Practice

Recent efforts focused on review of the Health Systems Science (HSS) blueprint as well as research to assess the exam's effectiveness in differentiating between medical student performance before, during, and after instruction. The work is part of NBME's collaboration with the American Medical Association's (AMA) [Accelerating Change in Medical Education Consortium](#). Additional efforts have centered on increasing the size of the item bank to broaden content coverage on future versions of the examination.

The goal is to better prepare students for physician practice by supporting the expansion and integration of HSS curricula in medical schools with a standardized, reliable, and valid measure for assessing HSS competencies. More information about HSS research is available on [page 36](#).

PMAC Yields Workplace-Based Assessment Learnings

For the past several years, NBME, together with the Association of Pediatric Program Directors and the American Board of Pediatrics, has researched approaches that advance the science of workplace-based assessment.

The work of the Pediatrics Milestones Assessment Collaborative (PMAC) has successfully identified a proof of concept demonstrating how resident assessment can be accomplished. The assessment items and instruments have produced reliable data that will allow medical educators to make more informed decisions about their learners as well as allow the community to fulfill external reporting requirements of the Accreditation Council of Graduate Medical Education. Additionally, the work has met learners' desires for more specific feedback and action that will enable more evidence-based decision making. Planned research will be completed in June 2019. This work has produced important findings that will shape the development of new assessments, particularly those that will measure critical soft skills such as physician-patient communications.



Thanks to the commitment and contributions of the Pediatrics faculty, residency programs' directors, and clinicians nationwide, the Pediatrics Milestones Assessment Collaborative has been successful in breaking new ground in workplace-based assessments."

Thomas Rebbecchi, MD, Vice President, Products and Services, NBME

See [page 44](#) for research findings: Does Incorporating a Measure of Clinical Workload Improve Workplace-Based Assessment Scores? Insights for Measurement Precision and Longitudinal Score Growth from Ten Pediatric Residency Programs.



NBME Hosts Discussions on the Future of Continuing Board Certification

NBME hosted an invitational conference for health professions collaborators to meet and discuss Collaborative Approaches in Continuing Certification in late 2018. The main program included presentations and small group activities designed to explore current goals, challenges, and opportunities in continuing certification. This forum afforded attendees the opportunity to deepen the conversation about continuing certification and identify areas of interest and concern for the professions that participants serve.

For many, it was the first opportunity to explore these questions with colleagues from different specialties. Participants noted how valuable it was to hear the experiences of colleagues across varied professions, and they expressed interest in continuing this important conversation.

Soon after, and as part of its process to review diplomate certification, the American Board of Medical Specialties (ABMS) issued a call for comments on the draft report and recommendations of its “Continuing Board Certification: Vision for the Future.” The NBME responded with a letter that supported the commission’s recommendations for independent research on the impact of continuing certification on patient care; asserted our belief that there is considerable evidence to suggest that assessment for continuing certification has had an important role in improving healthcare; and cited our ability and willingness to participate in the work related to determining which forms of assessment and professional development activities are most effective in helping diplomates maintain and enhance their clinical skills, remain current in their specialties, and improve the effectiveness and efficiency of continuing certification programs. NBME’s comments on the draft report followed earlier testimony provided to the Commission in March as part of ABMS’s data gathering prior to developing the draft report.

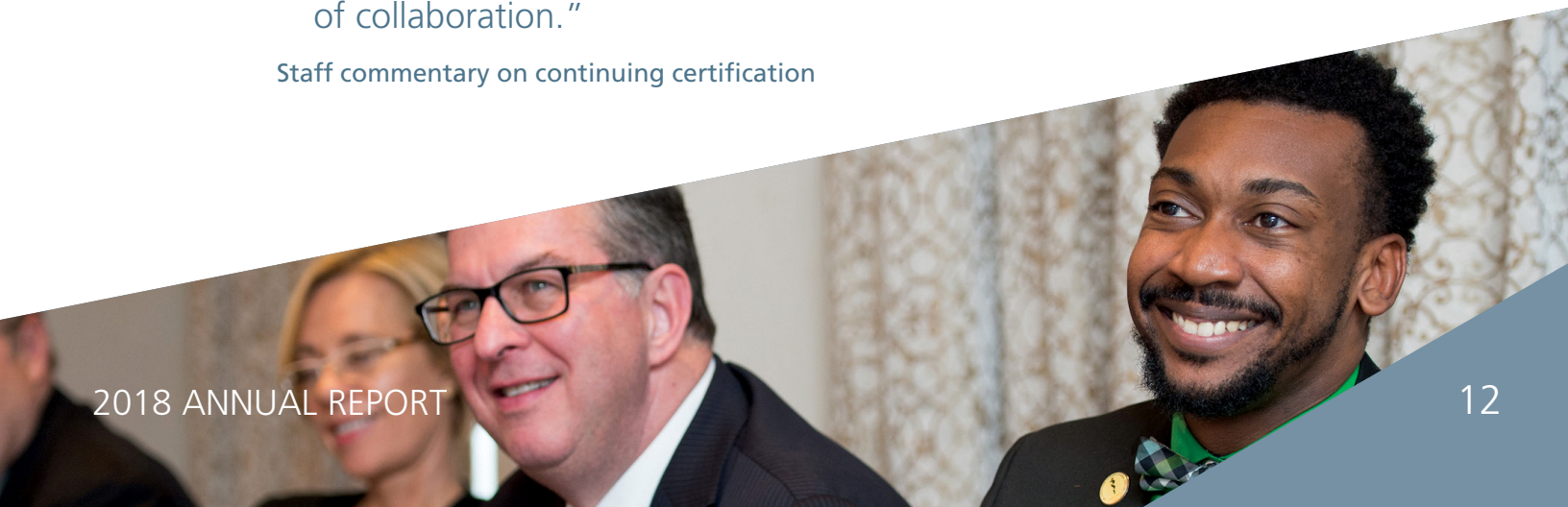
We also see our role as advancing the science of assessment, enabling us to bring greater value to the organizations with whom we partner, and to share what we learn so that others may also enhance the assessment programs they offer. We want to work together to develop even better assessment tools for learning, measurement, and education as well as patient outcomes.



NBME works with other healthcare organizations to **explore new kinds of relationships and experiment with new types of assessment.**

Our expertise in assessment **program governance and policy, psychometrics and standards, test development and administration,** and **stakeholder relations** is the foundation of collaboration.”

Staff commentary on continuing certification





ASSESSMENT IMPROVEMENTS: A SHIFT IN THINKING & CALL TO ACTION

Each year, our goal is to increase value among the current examinations. Exploring alternative assessments grows more and more important as well.

NBME is committed to discussing new approaches and competencies to serve healthcare consumers who enjoy a high degree of confidence in knowing that their doctors have met a common standard.

We also want to ensure the assessments meet the needs of healthcare students and practitioners. NBME's continuous improvement culture is beginning to deliver just that.

Short-Answer Questions Pilot Aims to Test Physician Practice

NBME is working to develop new assessment formats that more closely reflect day-to-day physician activity. In practice, physicians use their knowledge and training to make clinical decisions based on the information available. The short-answer item format is intended to mirror this by allowing examinees to provide short, free-text answers to assessment questions.

Short-answer questions (SAQs) require constructed responses with a limited number of words. They were added to the Medicine Clinical Science Subject Examinations administered at both medical schools and Prometric test centers in August 2018. In this pilot, instead of being given a list of options from which to choose an answer, the patient information is followed by a question such as "What is the most likely diagnosis?" The answer must be typed into the response field; there is a 60-character limit allowed in the response field.

Using an SAQ version of the same question may enhance the validity of scores. By removing any cues from potential answers, SAQ assessments may result in increased validity because this item format requires active generation of a response rather than recall based on a fixed number of prespecified options.

Research shows that SAQ items requiring very short, free-text responses can be as reliable as multiple-choice questions. And SAQs can be scored in an objective way. This objectivity of scoring leads to consistent results.



IN 2018,
**124 MEDICAL
SCHOOLS**
SUBSCRIBED TO CAS,
INCLUDING **22**
INTERNATIONAL SCHOOLS



Coming Soon: Faculty Assessment Tools Tailored to Specific Curricula

Customized Assessment Services (CAS) has been an important offering to the medical education community for more than a decade. The [CAS program](#) allows faculty to build high-quality, standardized assessments targeted to local curricula using secure NBME item banks.

The most common use of CAS is for evaluation at the end of a course or shorter instructional block. Other uses include remedial exams, basic science progress tests administered at set intervals, and end-of-year comprehensive assessments.



APPROXIMATELY **1,200** EXAMINATIONS
WERE CREATED AND ADMINISTERED TO MORE
THAN 124,000 EXAMINEES IN 2018 USING CAS.

NBME is launching an improved CAS program in 2019 with the following features:

- New clinical content along with high-quality NBME basic science content
- Key word search function to locate items easily
- A user-friendly interface for simple and efficient exam-building





OVERVIEW OF OUR ASSESSMENT SERVICES

A wide range of services and tools—for educators and students—are available for assessing healthcare skills and competency. Our services can be easily customized to specific geographic, cultural, and medical needs of healthcare institutions and systems around the world in order to meaningfully assess healthcare professionals.

EXAMINATION DEVELOPMENT	<ul style="list-style-type: none">• Conduct practice analyses• Select appropriate examination methods• Develop content specifications and examination blueprints
ITEM DEVELOPMENT	<ul style="list-style-type: none">• Provide item-writing workshops• Edit materials for style and clarity• Integrate complex multimedia in test questions• Facilitate item review meetings
EXAMINATION PUBLISHING	<ul style="list-style-type: none">• Compose examination forms• Facilitate examination form review meetings• Publish examinations for computer administration• Prepare tutorials and practice examinations
EXAMINATION ADMINISTRATION	<ul style="list-style-type: none">• Prepare candidate brochures and proctor manuals• Assist in identifying test sites• Implement requested test accommodations• Monitor and assist with test-day issues
PSYCHOMETRIC SERVICES	<ul style="list-style-type: none">• Review item statistics• Validate answer keys• Score examinations• Equate test scores• Facilitate pass/fail standard setting• Prepare and distribute score reports
RESEARCH & SPECIAL SERVICES	<ul style="list-style-type: none">• Create and administer surveys• Collaborate on research studies and other initiatives• Consult on strategic evolution and future plans• Prepare for accreditation reviews (ANSI/ISO 17024, NCCA)• Present seminars on selected topics



Examinee Input Drives Creation of New Website for NSAS

Medical students and graduates have long used [NBME Self-Assessment Services \(NSAS\)](#) to measure their readiness in preparing for the USMLE. At NBME, we've worked hard to make certain the online systems providing services are evolving with the changing needs of examinees, medical schools, and volunteers. To that end, our cross-functional team implemented several upgrades including the construction of a new website, MyNBME. MyNBME was designed based on feedback obtained from students and residents during focus groups and pilot trials.

Several improvements were made to NSAS. In June 2018, NSAS began providing the correct answers for all questions and items, not just those that are incorrectly answered. Other upgrades were made to the resulting Score Interpretation Guide. For example, a new confidence interval calculation for Comprehensive Basic Science Self-Assessments (CBSSA) and Comprehensive Clinical Science Self-Assessments (CCSSA) helps students better estimate USMLE performance.

Other new benefits include the provision of correct answers to examinees for all of the questions as part of their feedback for all CBSSA, CCSSA, Comprehensive Clinical Medicine Self-Assessments, Clinical Science Mastery Series, and IFOM Self-Assessments. Program updates are listed on [page 20](#).





UNDERWAY: OUR JOURNEY OF ORGANIZATIONAL TRANSFORMATION

NBME seeks to bring the highest possible value to its stakeholders, from examinees and medical schools to health professions organizations and collaborators. Our vision is that by 2030, NBME will be a well-known and highly respected global resource for assessment services for healthcare professionals throughout their education, continuing training, and healthcare careers.

To clarify the steps necessary to achieve this vision, we have enacted a strategy management system to support:

1. Clear articulation of internal work priorities, which are designed to bring benefit to our stakeholders
2. Alignment of our work to our strategic priorities, which helps us fulfill our mission and vision
3. Maximization of the impact and value our work brings to our stakeholders

These efforts are supported by our continued commitment to evolving our culture and to adopting a continuous improvement mindset. Our 10 Culture Bold Statements are integrated into our daily work and interactions as evidence of our transformational journey. Our continuous improvement mindset continues to build, as almost a third of the organization completed foundational training in the NBME Way—a set of continuous improvement tools selected for their fit with our style of work.

The weaving of clarified strategy, heightened attention to culture, and highly valued continuous improvement is critical to delivering value to our stakeholders through our staff, which is necessary for us to make progress on our mission.



We are best known for producing the highly reliable and highly structured assessments central to successful licensure programs. These assessments are the **core of the USMLE program and the NAVLE**.

NBME also has a long history of experimenting with assessing competencies that go beyond knowledge, such as performance assessments of clinical and communication skills (e.g., USMLE Step 2 Clinical Skills), professionalism, clinical decision making, patient management skills, and teamwork.”

Staff commentary on continuing certification

With Our Mission In Mind

NBME's mission remains at the forefront of our work: To protect the health of the public through state-of-the-art assessment of health professionals. While centered on assessment of physicians, this mission encompasses the spectrum of health professionals along the continuum of education, training, and practice and includes research in evaluation as well as development of assessment instruments.



NBME Values Support Customers, Collaboration, and Innovation

Our Culture Bold Statements

It begins with leadership. Then it takes all of us.

- ✓ I set clear priorities and resource them.
- ✓ I delegate and make decisions in service of the NBME.
- ✓ I communicate directly, simply, and with empathy.
- ✓ I actively seek collaboration.
- ✓ I contribute to our caring and diverse community.
- ✓ I respectfully hold myself and my colleagues accountable for results.
- ✓ I make time for work-life balance, reflection, planning, and relationships.
- ✓ I take courageous action, wonder with colleagues, innovate, and continuously improve.
- ✓ I lean in to conflict as a source of creativity.
- ✓ I look outward to learn—outside my department and beyond our walls.

New Technology Better the Examinee and Customer Experience

In December 2018, NBME launched a new examinee website—[MyNBME](#)—aimed at improving each visitor's experience by helping to make registering, purchasing, launching, and viewing exam performance feedback easier and seamless. The website streamlines registration through a single point of entry and, thereby, eliminates the need for multiple user IDs and passwords. Additionally, MyNBME may be used to:

- Purchase products across different product lines in a single transaction
- View and download scheduling permits and score reports
- Complete other activities and communications not only with NBME, but also with our collaborators: Educational Commission for Foreign Medical Graduates and International Consortium for Health & Wellness Coaching

Student and resident focus groups and pilot trials helped design and obtain feedback about this system. MyNBME can be used by students who are registering for the IFOM exam and the Health & Wellness Coach Certifying Examination; it can also be used by students interested in gauging readiness for USMLE through NSAS.

The screenshot displays the MyNBME website interface. At the top, there is a navigation bar with tabs: HOME, PURCHASE, MY EXAMS, PURCHASE HISTORY, and SUPPORT. Below this, a 'WELCOME' message states: 'The highest-quality assessments available are here to help gauge your progress and knowledge. This one-stop shopping and exam website is specially designed to order assessments from NBME®. Follow the instructions after ordering to complete the process.' Below the welcome message are links for REGISTRATIONS, ORDERS, and CASES, with a 'View History' link under REGISTRATIONS. A table titled 'ALL REGISTRATIONS' lists three items:

REGISTRATION ID	PRODUCT	REGISTRATION STATUS	FORM NAME
1. 10/15/2018	Comprehensive Clinical Science Self-Assess...	Assessment Available	Form 8
1. 10/15/2018	Clinical Neurology Self-Assessment	Assessment Available	Form 4
1. 10/15/2018	Comprehensive Clinical Science Self-Assess...	Assessment Available	Form 8

On the right side of the interface, there is a video player showing a 'NATIONAL BOARD OF MEDICAL EXAMINERS' video, and a 'Shopping Cart' section that says 'You have no items in your shopping cart.'



Enhancements for Committee Members and Volunteers Speed Up Processes

The Connect Portal, where committee member volunteers sign in to participate in NBME activities, expanded the number of applications available from one to four in 2018. The Connect Portal provides single sign-on to each of these applications, eliminating the need for our committee members to remember multiple user IDs and passwords. Two-factor authentication was also added to their single sign-on access to protect sensitive data.

To streamline NBME's item authoring process, we implemented a new software application to enhance exam item authoring, editing, review, and item bank management. The innovative application significantly improves the item writing experience for committee members and staff due to its ease of use and clean, up-to-date interface.

Using its new workflow capabilities, committee members and NBME staff can collaborate on item development within the same system, eliminating the need to pass Word documents back and forth.



I like the options available to construct the question" within the system. "Also, all the other elements needed as far as explanation, citation, etc., are easy to add."

Committee member survey response

New IT Leadership Brings Fresh Thinking to NBME IT

NBME was excited to welcome Andrew F. Farella to NBME in 2018. He serves as Senior Vice President of Information Technology. Farella formerly was Associate CIO, AVP Business Applications of Children's Hospital of Philadelphia.



Andy's experience and perspective were just what we were looking for, an ideal balance that will enable him to fit in well at the NBME while also bringing new ideas and a fresh point of view to our organization."

Peter J. Katsufakis, MD, MBA, President and CEO of NBME





2018 PROGRAM UPDATES

Licensure Updates

- The United States Medical Licensing Examination® (USMLE®)
 - Medical Student / Resident Advisory Panel
 - State Board Advisory Panel
 - Redesigned Examinee Score Reports
 - Step 2 CS—Short Videos Provide Examples
 - USMLE Standard Setting Activities
 - Performance Details of Examinees Taking USMLE
 - New Tool Seeks to Better Residency Experience
 - Step 2 CK Administrations
 - Examination Committees and Directory (NBME.org)

- Post-Licensure Assessment System
 - New SPEX Content and Length
- North American Veterinary Licensing Examination (NAVLE)

NBME Assessment Updates

- Medical School Services
 - Subject Examinations
 - Customized Assessment Services
 - NBME Self-Assessment Services (NSAS)
- Health Professions Organizations
 - NBME Convenes Continuous Certification Discussion
 - HSS Blueprint Review

LICENSURE

The United States Medical Licensing Examination® (USMLE®)

The high quality of the USMLE program is in large part due to the enormous effort of hundreds of volunteers who serve on USMLE committees. In addition to participation in test material development activities, medical school faculty members and practicing physicians serve on committees charged with item review, content-based standard setting activities, test blueprint construction, form review, overall examination design and policy, and resolution of issues associated with examination security.

Select committees developing test materials for the USMLE also provide guidance for staff in the development of NBME subject examinations. The work of our test committee members in meeting the extraordinary standards of the national licensure examination program exemplifies the medical profession's tradition of public service.

The following summary includes highlights of significant activities in 2018; additional information on research initiatives is provided elsewhere in the report.

USMLE, co-sponsored and co-owned by NBME and FSMB, is the largest NBME examination program, accounting for more than 75 percent of NBME's programmatic activity.



400+ INDIVIDUALS
FROM MEDICAL EDUCATION,
LICENSING, AND PRACTICE
**SERVE ON A USMLE
COMMITTEE, PANEL, OR
TASK FORCE EACH YEAR**

Student/Resident Advisory Panel

The USMLE Medical Student and Resident Advisory Panel, composed of medical students and residents from across the US and internationally, met twice in 2018. This group is charged to:

- Assist USMLE staff in working through operational issues directly impacting the examinee experience of the exam
- Serve as a voice and resource to inform substantive policy questions facing official USMLE committees

Topics the panel has been asked to address or weigh in on include strategic enhancements to the USMLE, communication strategies to examinees, performance feedback to examinees, the testing day experience of examinees, and changes in USMLE policy.



The people who make the USMLE tests are the people you see in your medical schools and hospitals. It's not an exam to see if we can stump you, but to really make certain that you are the best physician out there."

Courtney Johnson, Resident member, USMLE Management Committee

State Board Advisory Panel to the USMLE Program

The State Board Advisory Panel, composed of staff and members from state licensing authorities across the US, met once in 2018. The panel convenes annually to provide feedback on current and potential USMLE issues and policies that may impact state medical boards. The meetings also provide the opportunity to hear from boards about issues that are impacting their individual states that may also be of interest to or impact the USMLE program.



Redesigned Examinee Score Reports

The [USMLE score reports](#) were redesigned to reflect both advances in the underlying science of assessment and changes to the USMLE program over time. A number of stakeholders, including examinees, medical school faculty, and residency program directors, provided feedback on the proposed design to the USMLE program prior to finalization.

The report now features a chart showing an examinee's performance compared with recent first-time takers from US and Canadian medical schools. The examinee's performance in individual content areas relative to their overall Step 3 performance and information about the allocation of items across each content area are also included in the new score reports.

Examinees taking the [Step 3 examination](#) and testing on or after October 1, 2018, were the first to receive score reports in the new format. It was then implemented for the Step 1 and Step 2 Clinical Knowledge (CK) examinations in early 2019. A new score report format for the Step 2 Clinical Skills (CS) examination is under development.

An interactive illustration of the features of the new report format is available on [USMLE.org](#), along with FAQs about the new design.

“ The USMLE doesn't just ask you to regurgitate information like the Krebs Cycle. Anyone can look that up but what will a physician do when that information is placed in front of him or her? We want to know an examinee can reason and apply knowledge.”

Yasyn Lee, Member, USMLE Management Committee and USMLE Composite Committee

Step 2 CS—Short Videos Provide Examples

To increase the transparency of the exam and respond to examinees' desire for guidance, the USMLE program, working with the NBME Marketing and Communications Department, created brief videos that depict reenactments of actual examinee performances on the USMLE Step 2 Clinical Skills (CS) examination. These videos are posted on [USMLE.org](#) with the practice and orientation materials for the examinations. Names of examinees and standardized patients were changed, and all videos are less than two minutes in length.

The videos provide examples of an actual examinee performance at an acceptable level and may be helpful to individuals preparing to take the Step 2 CS exam.





USMLE Standard Setting Activities

For each Step examination, a pass or fail result is provided. Passing results are based on achievement of specified levels of proficiency established prior to administration of examinations. Statistical procedures are employed to ensure that for each Step, the level of proficiency required to pass remains uniform across forms of the examination.

The USMLE Management Committee is asked to complete an in-depth review of standards for each examination every three to four years. The Management Committee conducted a review of standards for the Step 2 CK examination in 2018, considering information from multiple sources, including:

- Recommendations from independent groups of physicians who participated in content-based standard-setting activities in 2018
- Results of surveys of various groups (e.g., state licensing representatives, medical school faculty, examinees) concerning the appropriateness of current passing requirements for the Step 2 CK examination
- Data on trends in examinee performance
- Data on precision of pass/fail classifications

As a result of its review, the USMLE Management Committee voted to maintain the recommended minimum passing score of 209, thus not making any adjustment to the current passing standard for Step 2 CK.

NEARLY 250 MEMBERS & STAFF FROM
60 DIFFERENT MEDICAL AND OSTEOPATHIC
BOARDS HAVE **PARTICIPATED IN USMLE**
SINCE IT BEGAN





Details on the performance of examinees taking USMLE in the past two years are provided in the following tables.

TABLE 1 – 2017-2018 STEP 1 ADMINISTRATIONS

Number Tested and Percent Passing

	2017		2018*	
Examinees from US/Canadian Schools that Grant:	# Tested	% Passing	# Tested	% Passing
MD Degree	21,382	94%	21,611	95%
1st Takers	20,353	96%	20,670	96%
Repeaters**	1,029	67%	941	67%
DO Degree	3,835	95%	4,136	96%
1st Takers	3,786	95%	4,092	96%
Repeaters**	49	76%	44	73%
Total US/Canadian	25,217	94%	25,747	95%

Examinees from Non-US/Canadian Schools	# Tested	% Passing	# Tested	% Passing
1st Takers	14,900	78%	14,332	80%
Repeaters**	2,303	41%	2,111	44%
Total non-US/Canadian	17,203	73%	16,443	75%

*Represents data for examinees tested in 2018 and reported through January 30, 2019.

**Repeaters represents examinations given, not number of examinees.

TABLE 2 – 2016-2018* STEP 2 CK ADMINISTRATIONS
Number Tested and Percent Passing

	2016-2017		2017-2018	
Examinees from US/Canadian Schools that Grant:	# Tested	% Passing	# Tested	% Passing
MD Degree	21,071	95%	22,367	96%
1st Takers	20,140	96%	21,531	97%
Repeaters**	931	66%	836	66%
DO Degree	2,581	94%	3,076	94%
1st Takers	2,547	95%	3,038	95%
Repeaters**	34	68%	38	74%
Total US/Canadian	23,652	95%	25,443	96%

Examinees from Non-US/Canadian Schools	# Tested	% Passing	# Tested	% Passing
1st Takers	11,949	81%	11,469	83%
Repeaters**	2,342	50%	2,144	52%
Total non-US/Canadian	14,291	76%	13,613	78%

*Data for Step 2 CK are provided for examinees tested during the period of July 1 to June 30.

**Repeaters represents examinations given, not number of examinees.

TABLE 3 – 2016-2018* STEP 2 CS ADMINISTRATIONS
Number Tested and Percent Passing

	2016-2017		2017-2018	
Examinees from US/Canadian Schools that Grant:	# Tested	% Passing	# Tested	% Passing
MD Degree	21,064	96%	21,543	94%
1st Takers	20,285	96%	20,438	95%
Repeaters**	779	90%	1,105	87%
DO Degree	46	96%	64	86%
1st Takers	45	96%	59	85%
Repeaters**	1	†	5	100%
Total US/Canadian	21,110	96%	21,607	94%

Examinees from Non-US/Canadian Schools	# Tested	% Passing	# Tested	% Passing
1st Takers	11,790	82%	11,223	75%
Repeaters**	1,968	72%	2,114	61%
Total non-US/Canadian	13,758	81%	13,337	73%

*Data for Step 2 CK are provided for examinees tested during the period of July 1 to June 30.

**Repeaters represents examinations given, not number of examinees.

†Performance data not reported for categories containing fewer than 5 examinees.

TABLE 4 – 2016-2018* STEP 2 CLINICAL SKILLS ADMINISTRATIONS

First Taker Passing Rates** for Subcomponents: Integrated Clinical Encounter (ICE), Communication and Interpersonal Skills (CIS), Spoken English Proficiency (SEP)

	2016-2017			2017-2018		
	ICE	CIS	SEP	ICE	CIS	SEP
All US/Canadian Schools	97%	99%	>99%**	96%	98%	>99%**
All non-US/Canadian Schools	85%	95%	99%	81%	94%	93%

*Data for Step 2 CS are provided for examinees tested during the period of July 1 to June 30.

**>99% signifies those passing rates that would otherwise round up to 100%.



Inside Step 3 CCS – A new video geared toward medical students preparing for Step 3 Computer-based Case Simulations, this illustrates how to run a case using the Primum® software.

In 2018, the Clinical Skills Evaluation Collaboration (CSEC) administered 35,213 USMLE Step 2 CS examinations (21,737 US/Canadian medical graduates, and 13,476 international medical graduates).

CSEC BY THE NUMBERS

- Total test administrations 2004-2018: 487,767 examinees
- Total standardized patient encounters 2004-2018: 5,888,016
- Highest number of test administrations in a calendar year: 36,030 (2015)
- Highest number of test administrations, US/Canadian medical students/graduates, in a calendar year: 21,737 (2018)
- Highest number of test administrations, international medical students/graduates, in a calendar year: 17,481 (2008)

TABLE 5 – 2017-2018 STEP 3 ADMINISTRATIONS
Number Tested and Percent Passing

	2017		2018*	
Examinees from US/Canadian Schools that Grant:	# Tested	% Passing	# Tested	% Passing
MD Degree	20,094	97%	20,595	97%
1st Takers	19,405	98%	19,948	98%
Repeaters**	689	73%	647	73%
DO Degree	13	100%	23	96%
1st Takers	13	100%	23	96%
Repeaters**	0	N/A	0	N/A
Total US/Canadian	20,107	97%	20,618	97%

Examinees from Non-US/Canadian Schools	# Tested	% Passing	# Tested	% Passing
1st Takers	8,226	88%	8,913	90%
Repeaters**	1,439	60%	1,419	59%
Total non-US/Canadian	9,665	84%	10,332	86%

*Represents data for examinees tested in 2018 and reported through January 30, 2019.

**Repeaters represents examinations given, not number of examinees.

†Performance data not reported for categories containing fewer than 5 examinees.

N/A – not applicable.



New Tool Seeks to Better Residency Experience

Given the many challenges that medical students and residency programs face in the residency application process, the USMLE program is collaborating with the Association of American Medical Colleges on the development of a new tool to help students as they explore residency programs in their chosen specialties. Also collaborating are the National Resident Matching Program and the American Medical Association.

This tool, which will be offered free of charge to residency applicants, will provide verified data as an alternative to the many crowdsourced resources that applicants currently use, many of which may not be reliable or trustworthy. A pilot with US medical students is planned for summer 2019.

USMLE and NBME Examination Committees

Individuals who accept invitations to join USMLE test committees receive training in the development of USMLE-style test items and cases in several ways. Members of multiple-choice question Test Material Development Committees (TMDCs) attend a 2-day workshop prior to their first committee meeting where they meet NBME staff and other new committee members; learn about issues related to content sampling, psychometric performance, item difficulty and discrimination; and participate in a mock committee meeting during which test items they have written are discussed and edited. Members of the Step 3 Computer-based Case Simulations and the Step 2 CS TMDCs attend a half-day of training and orientation prior to their first committee meeting.

In addition, every year, members of state medical licensing boards are invited to participate in a 1-day workshop at NBME to learn more about the program and the process of creating test materials. Usually one or more participants express an interest in joining test committees following this workshop. The USMLE program is always interested in adding individuals with state licensure expertise to its pool of volunteers.





In 2018, 46 percent of committee members were women. Members of minority racial/ethnic groups made up 19 percent of members. Sixty-five percent held a medical degree, 28 percent both a medical doctor degree and another advanced degree, and 6 percent the PHD degree alone. A small number held degrees in nursing, pharmacology, or other related fields. In terms of geographic distribution, 36 percent were from the South, 24 percent from the Midwest, 25 percent from the Northeast, and 15 percent from the West. Three percent of the committee members were either current or former members of state licensing boards. Over the past 10 years, virtually all Liaison Committee on Medical Education–accredited medical schools in the United States have been represented on committees supporting USMLE.

It is with great pride that we list the names of the biomedical scientists, educators, and clinicians who served on USMLE committees in 2018 in the online [NBME Committee and Volunteer Directory](#) and on **page 46**. NBME, and the profession and public served by the USMLE, are indebted to these volunteers who contribute their expertise and energy to the creation of a national licensing examination system that is without equal.



**20+ DIFFERENT
TEST COMMITTEES**
WRITE TEST
QUESTIONS AND
CASES FOR STEP 1,
2 CK, 2 CS, AND 3



4 THINGS TO KNOW ABOUT USMLE



USMLE IS A JOINT PROGRAM
BETWEEN FSMB AND NBME



140k

APPROXIMATE NUMBER OF USMLE
EXAMS ADMINISTERED ANNUALLY

2.7M

USMLE TEST ADMINISTRATIONS
SINCE THE EXAM'S
IMPLEMENTATION IN 1992



>50%

MORE THAN HALF OF ALL ACTIVELY
LICENSED PHYSICIANS IN THE US
HAVE TAKEN ALL OR PART OF THE
USMLE SEQUENCE



Post-Licensure Assessment System

The Post-Licensure Assessment System (PLAS) is a joint activity of NBME and FSMB. PLAS was developed to assist medical licensing authorities in their competency assessment of previously licensed physicians who have fallen out of practice for personal or disciplinary reasons. Physicians can participate in an assessment either by self-referral or third-party referral. PLAS includes the Special Purpose Examination (SPEX®) and other resources for clinical competence assessment.

In 2018 the SPEX Oversight Committee was engaged to assist with the creation of a new version of SPEX.

Changes to SPEX include:

Content—New item formats (e.g., drug ads and abstracts) were implemented. The new version of SPEX primarily focuses on tasks that physicians perform in practice (i.e., competencies for practice) and less on mechanisms of disease items (i.e., disease applications relating to underlying basic sciences).

Length—The length of the exam was shortened by 8 ½ hours and contains fewer items.

- Old SPEX: 8 ½ hour exam with 336 items
 - 7 blocks of 64 minutes each, with 48 items per block; plus break(s) and tutorial
- New SPEX: 6-hour exam with 200 items
 - 5 blocks of 60 minutes each, with 40 items per block; plus break(s) and tutorial

The new SPEX went live on January 15, 2019.

Special Purpose Examination (SPEX)

- In 2018, 103 examinees took the SPEX. Previous years' volume was 153 (2017) and 129 (2016).
- SPEX was migrated to a new computer browser in the summer of 2017. This new browser introduced additional accessibility features.
- NBME and FSMB staff traveled to the Association of Medical Councils of Africa meeting in Ghana to meet with African nations on the possible use of SPEX as a licensure competency exam in certain African countries. Discussions with the Health Professions Council of South Africa are ongoing.

Assessment Center Activities

- The PLAS program continues to provide a toolbox of assessment services to third-party collaborators at eight different locations.
- In 2018, 121 physicians received assessments through the assessment center network.

North American Veterinary Licensing Examination (NAVLE)

NAVLE, co-sponsored and co-owned by the International Council for Veterinary Assessment (ICVA) and NBME, is a requirement for licensure to practice veterinary medicine in all licensing jurisdictions in North America. NAVLE is overseen by the Collaboration for Veterinary Assessments (CVA) Governance Committee, comprising members appointed by the ICVA and NBME.

Additional assessments offered by ICVA include:

- NAVLE self-assessment
- Veterinary Educational Assessment (VEA)
- Species-specific examinations for small animal and equine medicine
- Wisconsin State Laws and Rules Examination

The following summary includes examinee performance data and highlights significant collaboration activities in 2018.

The collaboration progressed with achievements highlighted on **page 7**.

NAVLE Administration and Pass Rates

A pass or fail result is provided for each examinee.

	2015-2016		2016-2017		2017-2018	
	Cycle		Cycle		Cycle	
	# Tested	% Passing	# Tested	% Passing	# Tested	% Passing
Criterion Group ¹	4,091	89.8%	4,072	88.4%	4,242	89.1%
Non-Criterion Group ²	825	66.1%	931	65.5%	988	65.4%
Nonaccredited Group ³	605	42.8%	584	44.3%	602	40.9%
Totals	5,521	81.1%	5,587	80.0%	5,832	80.1%

¹ Senior students of accredited veterinary schools who took NAVLE for the first time under standard testing conditions.

² Senior students of accredited veterinary schools who had previously taken NAVLE or took NAVLE with test accommodations or graduate veterinarians from accredited schools.

³ Graduates or senior students of foreign veterinary schools that are not accredited by the American Veterinary Medical Association's Council on Education.



OVERVIEW OF NBME ASSESSMENT PRODUCTS

In addition to building customer assessments, NBME offers Medical School faculty and students an array of out-of-the-box solutions that provide time-saving approaches to ongoing assessment and curriculum evaluation. Our Subject Examinations and Customized Assessment Services offer faculty high-quality assessment tools and useful performance data to help students identify areas to improve for their journey of continuous learning. They also help schools to improve curriculum. For students, we provide NSAS.

Medical School Services

Subject Examinations

To help educators and their students, NBME's [Subject Examinations](#) can measure students' understanding of critical medical knowledge in foundational and clinical sciences. It also helps identify areas to improve for their journey of continuous learning.

Used in assessment throughout medical school curricula, NBME Subject Examinations saw modest growth in 2018 with the total number of exams administered domestically and internationally exceeding 255,000. Over 33,000 of these examinations were administered at Prometric testing centers.

Program Highlights for 2018:

- The timing and total number of items for the [Comprehensive Clinical Science Examination](#) increased on May 8, 2018. The time allotted to complete each exam section increased to correspond to the time per item on USMLE Step 2 CK. The total number of items increased to 200 to provide more precise total test and content area feedback.
- NBME is now using a new score scale for the [Emergency Medicine Advanced Clinical Examination](#). The new scale reports equated percent correct scores instead of scaled scores. The new equated percent correct score reflects an examinee's mastery of the content domain and can be used to compare and track school and examinee performances over time and across test administrations.
- In July 2018, NBME launched the new [Histology Basic Science Subject Examination](#). This exam replaces the former Histology and Cell Biology exam. For additional information about the new exam, [watch a video](#) featuring Joseph Grande, MD, PHD, faculty member at the Mayo Clinic College of Medicine and Science, Rochester, Minnesota, and Histology Task Force chair. The exam length and timing remained the same.
- NBME began piloting short-answer questions on the [Medicine Clinical Science Subject Examinations](#) administered at both medical schools and Prometric test centers on August 2, 2018. More information about this innovative approach is described on [page 13](#).

Customized Assessment Services

[Customized Assessment Services \(CAS\)](#) has been offering faculty at medical education institutions services for more than a decade. CAS enables faculty to build high-quality, standardized assessments targeted to local curricula using secure NBME item banks.

The most common use of CAS is for evaluation at the end of a course or shorter instructional block. Other uses include remedial exams, basic science progress tests administered at set intervals, and end-of-year comprehensive assessments. Read about improvements for CAS on [page 14](#).



NBME Self-Assessment Services (NSAS)

Medical students and graduates use [NBME Self-Assessment Services \(NSAS\)](#) to measure their readiness in preparing for the USMLE. NSAS provides examinees with the ability to test using content and item formats that once appeared on USMLE or subject exams. The performance feedback shows diagnostics that highlight strengths and opportunities for improvement and enables the ability to measure individual progress through longitudinal feedback.

We've worked hard to make certain the online systems providing services are evolving with the changing needs of examinees, medical schools, and volunteers. Read about improvements to NSAS on [page 18](#).

In June 2018, NSAS began providing the correct answers for all questions and items, not just those that are incorrectly answered. Other upgrades were made to the resulting Score Interpretation Guide. More about these changes on [page 16](#).

HEALTH PROFESSIONS ORGANIZATIONS

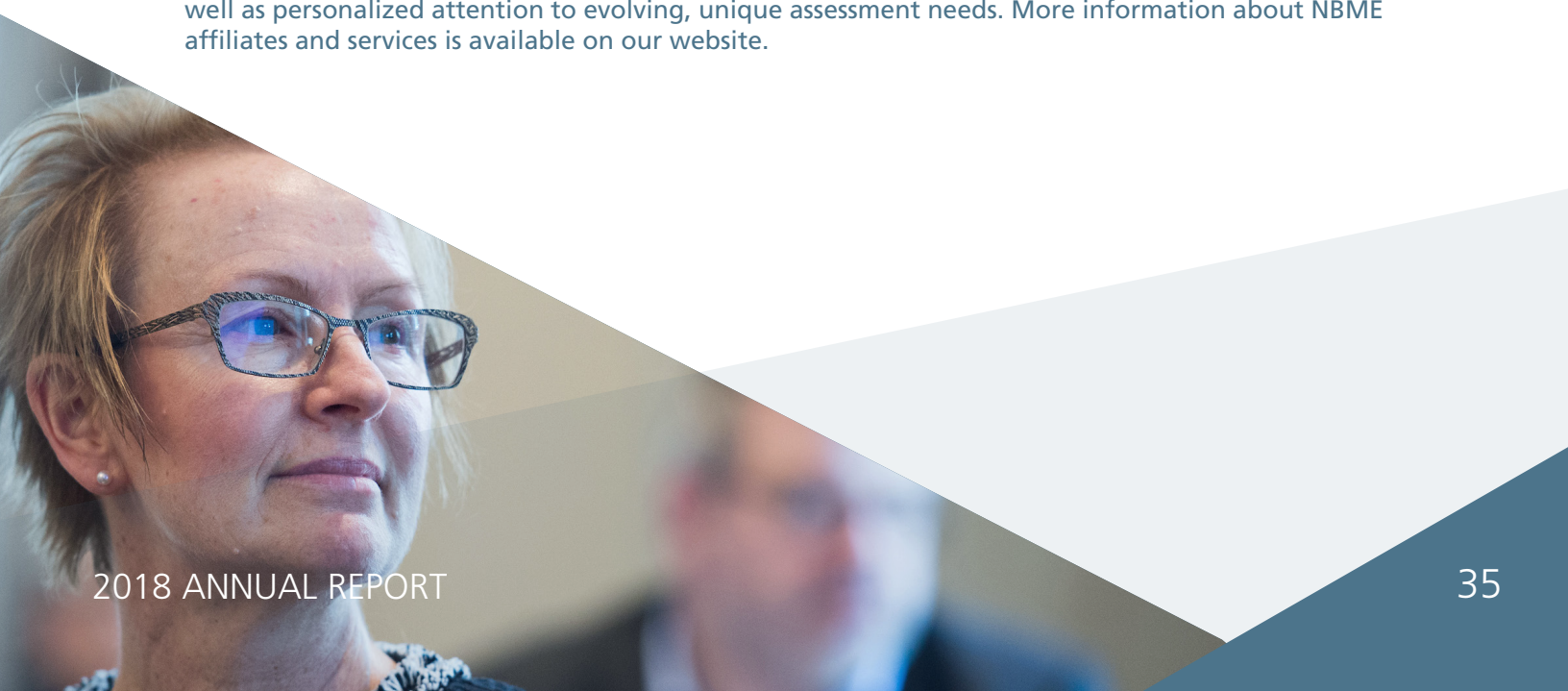
NBME Services Deliver Standards Providers Can Trust

NBME works with a variety of [health professionals and organizations](#) around the world to meet their unique assessment needs throughout the continuum of education, training, and practice. Assessments include licensure, certification, continuing certification, training selection, in-training and self-assessment examinations.

While individual assessment requirements may vary, the organizations with whom we work share similar missions. Each organization brings its unique expertise and perspective on healthcare practice and provides deep understanding and content expertise in their particular fields.

Some examination programs are co-owned, some are supported through fee-for-service contracts, and others are owned by NBME. Through combined expertise, collaboration, and continuous monitoring of assessment needs and trends, we work closely with stakeholders to establish and achieve mutual goals over time.

Many organizations have worked with NBME for over 20 years. These long-term relationships are built upon trust in the high quality of our assessment practices and the decisions they support as well as personalized attention to evolving, unique assessment needs. More information about NBME affiliates and services is available on our website.





NBME Convenes Continuing Certification Discussion in 2018

As the American Board of Medical Specialties (ABMS) Maintenance of Certification (MOC) process evolves and Boards explore alternative approaches to continuing certification, NBME has been involved with convening organizations to discuss:

- future directions (read about NBME's conference for health professions collaborators held in late 2018 on [page 12](#)),
- supporting Boards to develop test questions for new assessments, and
- offering recommendations about the value of assessment and opportunities for research on the effectiveness of different approaches to evaluating competency.

During 2018, NBME worked with the American Board of Medical Genetics and Genomics (ABMGG) to develop test questions for their new longitudinal assessment, including piloting methods to rapidly expand item pools. This development of test questions for a new longitudinal assessment was based on review of select knowledge sources.

We also collaborated with the American Board of Orthopaedic Surgery (ABOS) on two continuing certification initiatives. Here, NBME developed new practice profile recertification examinations, which will enable practitioners to take an examination that is relevant to their own subspecialty practice.

To support the development of new and review of existing examination blueprints, NBME worked with the American Board of Orthopaedic Surgery (ABOS) and the American Medical Association (AMA) to conduct rapid blueprinting exercises. This blueprint development method directly addresses the question of what should be on the test. It involves a small group of subject matter experts in developing a prototype that is vetted through a survey of a larger group of stakeholders. Engaging stakeholders not only achieves the goal of identifying appropriate knowledge, skills, and abilities to evaluate but creates buy-in for the process and content.

In addition to its own active research and development initiatives, NBME collaborates with health professions organizations to investigate programmatic research questions or conduct focused experimentation. During 2018, NBME collaborated with the American College of Physicians (ACP) and the American Board of Internal Medicine (ABIM) on a predictive validity study that looks at relationships between performance on the USMLE, ACP In-Training Examination, and ABIM Certification Examinations. We have also been working with the National Commission for Anesthesiology Assistants (NCCAA) to pilot a new method for rapidly expanding the item pool. After evaluating item performance data, study results will be available in 2019.

HSS Blueprint Review

Recent efforts have focused on the review of the Health Systems Science (HSS) Examination blueprint as well as research to assess the examination's effectiveness in differentiating between medical student performance before, during, and after instruction. This work is important to provide evidence for the validity of the exam as a standardized measure of medical student competence in HSS and means of evaluating the effectiveness of curricular changes. Additional efforts have focused on increasing the size of the item bank to broaden content coverage on future versions of the examination.

The HSS Examination is currently available to American Medical Association (AMA) Accelerating Change in Medical Education (ACE) Consortium medical schools through NBME's [Subject Examination Program](#). It will become available to additional schools in the near future.



SINCE ITS INITIAL LAUNCH IN 2016, MORE THAN **20 SCHOOLS** HAVE ADMINISTERED THE HEALTH SYSTEMS SCIENCE EXAMINATION TO MORE THAN **2,500** STUDENTS.

Research results supported the positive impact of curricular instruction. Scores for students who took the HSS Exam after instruction were statistically significantly higher than scores for students who took the examination before or during instruction.

NBME and American Medical Association staff presented these findings at the American Board of Medical Specialties 2018 Conference and engaged the audience in a lively discussion about the evolution of HSS education and assessment as well as the psychometric methodology and statistical analyses that support the validity of this exam. (More information about this collaboration appears on [page 11](#).)

A publication describing this work is forthcoming in the *American Journal of Medical Quality*.



RECOGNITION FOR SIGNIFICANT CONTRIBUTIONS

Louis N. Pangaro, MD, Named 2018 John P. Hubbard Award Winner

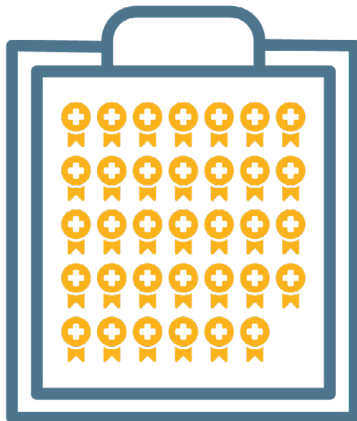
The 2018 John P. Hubbard Award for excellence in the field of evaluation in medicine was awarded to Louis N. Pangaro, MD, professor and chair for the Department of Medicine at the F. Edward Hébert School of Medicine at Uniformed Services University of the Health Sciences in Bethesda, Maryland.

The Hubbard Award is given annually to individuals for their outstanding contributions to the pursuit of excellence in the assessment of medical education and delivery of healthcare.



Dr. Pangaro has a distinguished and ongoing reputation of excellence, with national and international contributions to the assessment of professional competence and educational program development across the continuum of medical education. There are few people who have had such a broad impact both in terms of contributions to medical education but also to the professional development of many current leaders in medical education.”

Peter G. Anderson, DVM, PHD, 2018 Hubbard Award Committee Chair



34 HUBBARD

AWARDS FOR ACHIEVEMENT
IN MEDICAL EVALUATION
SINCE 1984

To learn more about Dr. Pangaro’s achievements and the Hubbard Award, [click here](#).

Grants Fuel Innovative Ideas

NBME awarded the 2017-2018 [Edward J. Stemmler Medical Education Research Fund](#) grants—totaling \$393,549—to researchers from the University of Michigan, University of Calgary, and Uniformed Services University of the Health Sciences. The grant funds are designed to provide support for research or development of innovative assessment approaches that will enhance the evaluation of those preparing to, or continuing to, practice medicine. The 2018 award winners included:



- Brian C. George, MD, of the University of Michigan, was awarded \$150,000 over two years for his project *Using Learning Curves to Redefine Training Requirements in General Surgery*.
- Primary investigators Maria Palacios Mackay, MD, and Rachel Ellaway, MD, of the University of Calgary, were awarded \$93,988 over two years for their project entitled *Seeking Constructive Alignment in Programs of Assessment*.
- Primary investigator Mary A. Andrews, MD, MPH, of Uniformed Services University of the Health Sciences, was awarded \$149,561 over two years for her project *A Randomized Trial of a Self-Regulated Learning Microanalytic Intervention to Improve Examination Performance in At-Risk Internal Medicine Clerkship Students*.

To learn more about the grants, [click here](#).

The Stemmler Fund was created in 1995 to promote advances in the theory, knowledge, or practice of assessment at any point along the continuum of medical education, from undergraduate and graduate education and training through practice.



Principal investigators say the Stemmler Fund grant provides a unique way to support ideas they can run with in an exploratory fashion, as opposed to accomplishing a much narrower, predetermined goal. Many investigators cite the award as a critical turning point in their academic careers. And we've discovered that many of the current stars of assessment research were recipients. Several projects have significantly affected the medical education arena."

Donald Melnick, MD, MACP, Distinguished Fellow of NBME

\$8.25 MILLION
IN MEDICAL ASSESSMENT
RESEARCH GRANTS IN 23
YEARS FOR **RESEARCH &**
DEVELOPMENT SINCE 1995



Latin America Grants Recipients to Further Evaluation of Learning Outcomes

NBME's [Latin America Grants program](#) presented three awards in 2018. The selected proposals include ideas for sustainable faculty development activities, creation of a Massive Open Online Course (MOOC), and development of a methodology for longitudinal assessment of abilities and skills acquired over the course of a medical internship. The proposals are designed to have a broad, sustainable impact by building local capacity to evaluate key learning outcomes in the education of those pursuing health professions. They are also expected to improve program quality at participating schools.



Three consortia were recipients of the 2017-18 NBME Latin America Grants that received an award of \$50,000 US over two years. They were selected from a total of 15 proposals submitted for review by the Latin America Grants Committee. The consortia proposals awarded grants are:

- Teacher Development for Programmatic Evaluation of Students in Health Degree Courses in Brazil
- MOOC Design for Training Teachers in Educational Assessment in Health Sciences
- Assessment of Abilities and Skills by Direct Observation in Medical Internship

Other Awards

2018 Distinguished Service Award Recipients

At the 2018 NBME Annual Meeting, the Edithe J. Levit Distinguished Service Award was presented to three individuals who have devoted countless hours to the work of NBME and exemplify the deep commitment and dedicated service of our volunteers.

KAREN E. HAUER, MD, PHD
FROM HER CITATION:



Dr. Karen Hauer's volunteer service with NBME began in 2004, when she worked on a Step 3 standard-setting panel. She has served on the Step 2 Medicine Committee, which she chaired from 2011-2013. She has served on several different interdisciplinary review committees, the USMLE Management Committee, and most recently as a member of the Physician Wellness Task Force. Karen has been a test committee representative in the NBME membership since 2009 and has served the maximum number of years in the test committee representative category of membership."



CATHY J. LAZARUS, MD
FROM HER CITATION:



Dr. Cathy Lazarus' record of NBME service goes back to 1998, when she served on the Step 1 Introduction to Clinical Diagnosis Committee. Our records show that she has served on approximately 25 other committees and task forces since that time. Some of the other committees Cathy served on include the Test Accommodations Committee, the USMLE Step 1 Committee, and the USMLE Step 1 Behavioral Science Test Committee, which she chaired from 2003-2005. In more recent years, Cathy has served as an item writer for the China Health Coach Project, and served on the Presidential Search Committee and the Finance and Audit committees."





YASYN LEE, MD
FROM HER CITATION:



Our records for Dr. Yasyn Lee date back to 2008, when she volunteered on the Step 3 Ambulatory Care Committee. She has served on and chaired the Step 3 Committee and several Step 3 interdisciplinary review committees. Yasyn's most recent volunteer work has included the USMLE Management Committee, the PLAS Governing Committee, which she chaired in 2016-2017, and the CSEC Operations Oversight Group."



NBME Researchers Recognized for Their Work

Three NBME researchers received notable recognition in 2018 for their influential studies in psychometrics, the science of measurement. Drs. Brian Clauser, Richard Feinberg, and Carol Morrison were honored with awards for career and research contributions.

Brian Clauser, EDD, was awarded the National Council on Measurement in Education Award for Career Contributions, given annually to honor a person whose contributions have had a widespread positive impact on the field of educational measurement. It is considered to be the most prestigious recognition of achievement in the area of psychometrics and assessment.

Richard Feinberg, PHD, was awarded the National Council on Measurement in Education Jason Millman Promising Measurement Scholar Award. This award recognizes a scholar at the early stages of their career—fewer than six years since earning a doctoral degree—whose research has the potential to make a major contribution to the applied measurement field.

Carol Morrison, PHD, was awarded the American Educational Research Association (AERA) Division I: Education in the Professions Established Investigator Award, given annually to the lead author of the outstanding paper presented as part of the AERA Annual Meeting (Division I). Carol was honored for a 2017 paper: Implementing a New Score Scale for the Clinical Science Subject Examinations, coauthored by fellow NBME employees Linette Ross, Greg Baker, and Marie Maranki.

To read more, [click here](#).





NBME Psychometrician Selected as Fellow of the College of Physicians of Philadelphia



Kimberly Swygert, PHD, Director of Research and Development, was selected as a Fellow of the College of Physicians of Philadelphia in November 2018. Her work on performance assessments, examinee timing and pacing, examinee repeater behavior, and score reporting has been presented at conferences and published in journals such as "Academic Medicine," "Advances in Health Sciences Education," the "Journal of General Internal Medicine," and the "Journal of Educational Measurement." Her chapter on performance assessments in the context of credentialing examinations appeared in 2016 in the updated "Handbook of Test Development." She is the co-editor and co-author of the most recent edition (2017) of best practices in item writing for medical educators, "Constructing Written Test Questions for the Basic and Clinical Sciences."

An Award from the AAMC Recognizes NBME's Own Brownell (Brownie) Anderson

The Association of American Medical Colleges (AAMC) announced a new Award for Emerging Educators named in honor of NBME's M. Brownell (Brownie) Anderson, MED, for her outstanding commitment to the Group on Educational Affairs (GEA). Ms. Anderson is Vice President, International Programs at NBME.

The GEA endeavors to advance medical education and medical educators through faculty development, curriculum development, educational research, and assessment in undergraduate, graduate, and continuing medical education. Brownie began her work with them in 1983 and continued that work for more than 25 years. In that time, in collaboration with many medical educators in all of the schools, she increased the attention to and support for medical education at the AAMC. The GEA wanted to recognize Brownie for her long-standing work with and commitment to the community of medical educators. They also aimed to honor her uncanny ability to identify, encourage, and welcome individuals early in their careers to the community of medical education.



“

In the spirit of M. Brownell Anderson, this award recognizes early career medical educators who have demonstrated enthusiasm, passion, commitment, and creativity in the field of medical education. This award identifies and supports emerging educators in their career trajectory in medical education and serves as an opportunity to recognize and validate their potential and talent in the field. The GEA owes a debt of gratitude to M. Brownell Anderson for recognizing and cultivating new leaders for many years, establishing a tradition that lives on through this award.”

The Association of American Medical Colleges Group on Educational Affairs

“

I am overwhelmed, humbled, and a bit terrified by having this award named for me and above all, incredibly grateful. All I did was ask people who inspired me to help me get the work done. I am so fortunate to have been given the opportunities I was given and to have been able to work with and learn from so many incredible people.”

M. Brownell “Brownie” Anderson, MED, Vice President, International Programs, NBME



RESEARCH: THE SCIENCE BEHIND NBME ASSESSMENTS

Examinees as well as the medical education and regulatory communities rely on the precision and utility of our assessments. NBME research provides the basis for this trust, yielding evidence for the value of products and ideas for paths to new types of assessment. Our researchers investigate topics that arise in support of operational programs and, often as an offshoot of these investigations, make contributions that advance measurement and medical education. In our research efforts NBME continues to seek collaborators.

Throughout our history, NBME research—led by our assessment experts and researchers with extensive training and experience in assessment sciences—has influenced the education of health professionals. Many of these efforts require years of exploration and field study, and not all efforts result in viable offerings. Ultimately, though, the research is aimed at providing value for our stakeholders as their needs evolve and to support learners and decision makers in improving the quality and performance of health professionals.

Ready...or Not? How Subject Exam Scores Predict Success on USMLE

To help medical educators evaluate student learning, NBME develops and administers the Comprehensive Basic Science Examination (CBSE) and the Comprehensive Clinical Science Examination (CCSE). Additionally, medical educators and their students view these valuable resources as a useful indicator of readiness for the USMLE Step 1 and Step 2. Investigators sought to answer the questions: how useful, and for whom?

Both exams were found to be predictive of scores on Step 1 and Step 2, with correlations ranging from .64 to .71, depending on exam and student groups. Interestingly, CBSE was more predictive for international medical graduates (IMGs) than for U.S. medical students. The IMG effect can be attributed to a variety of factors, including the time lag between exams and the exposure of students to educational intervention between the time of taking CBSE on one hand, and Step 1 on the other. The results support the use of CBSE and CCSE scores for students from a wide range of backgrounds.

Source: Morrison, C., Ross, L., Smith, L., & Maranki, M. (2018). Using NBME Comprehensive Subject Examinations to Assess Readiness for USMLE Step 1 and Step 2 CK: A Comparison of US/Canadian and International Medical School Students. "Medical Science Educator," 28(1), 125–31.

Piloted Automated Item Generation Shows Early Promise

Automated Item Generation is a well-established method of quickly and inexpensively developing new multiple-choice questions. It can produce a large number of test items using the same amount of subject matter expert resources that would previously have produced 10 or 20 items.

NBME's pilot work began in 2017 and continues today to determine how to make use of this method. A representative sample of items from all generated models was reviewed by a set of content experts, and approximately 150 items that were viewed as suitable will be pretested on USMLE Step 1 in 2019.

Why is NBME interested in this? We face challenges similar to those faced by many assessment organizations: rapidly evolving test blueprints, increasing numbers of test-takers, and the need for more continuous or readily available test administrations. Successfully addressing these challenges



requires, in part, creating larger item pools at a more rapid rate than would be permitted by traditional approaches. Increased item production enables the measurement of additional blueprint competencies and enhances test security by enabling more frequent item retirement/replenishment. This innovation could allow us to provide the test items that our customers need in a more rapid fashion.

Prediction & Psychometrics: Using NLP to Foretell the Quality of Test Items

Test items for USMLE are rigorously pretested before they “go live” for scoring purposes. The statistics from pretesting determine, along with subject matter expert review, which items can then be used as live items on subsequent test forms.

What if we could use a test item’s linguistic features to predict its statistical qualities in situations where pretesting slots are scarce or when pretesting is not an option? The savings in cost and time would be considerable. This study subjected 1,500 previously administered test items to various natural language processing (NLP) analyses with the goal of developing models that could predict which items would survive pretesting and which would not. The most effective models performed with 59 percent accuracy—or 9 percent above what would be expected by chance—using features such as lexical structure, cognitive complexity, and text cohesion. While there is clearly room for improvement, this initial effort and others like it, suggest the promise of NLP for looking into the future of a test item’s encounter with real examinees.

Source: “Predicting Item Survival.” Presented at the annual meeting of the National Council of Measurement in Education (NCME), Toronto, ON, April, 2019.

For more than a decade, another active area of research and development is the type of scoring of the Patient Note portion of the USMLE Step 2 Clinical Skills Exam. A hybrid scoring approach has been adopted that combines judgments from human raters with computer-generated scores based on NLP. Research has shown that the reliability of a hybrid score can exceed the reliability of human ratings alone. Physicians are involved in training the new scoring system, and they will continue to review all examinee scores at or below the minimum competency level.

Computer-assisted scoring is widely used in educational assessment and has been used for nearly two decades to score the computer simulations that are part of the Step 3 examination. The use of computer-assisted scoring in Step 2 CS is expected to enhance the quality and efficiency of assessment and will be ready for implementation in the second half of 2019.

Adjusting Clinical Performance Ratings to Account for Rater Workload

One of the challenges of obtaining reliable and valid measures of clinical performance is workload demands. Supervisors and peers who provide the ratings may have workloads that do not always allow sufficient time to observe and evaluate the performance of others. This is a challenge even when multiple measures are obtained from multiple raters over time. Why? The less accurate ratings from very busy people can negatively impact the overall quality of ratings.

In this study, investigators evaluated different statistical models to adjust performance ratings for workload in the context of pediatric residency. Judgments of workload were based on self-assessments provided by each rater. All statistical models were shown to significantly improve the reliability of performance ratings. While these results require replication in other settings, the findings suggest a simple and effective approach to improving the quality of performance ratings in busy clinical settings.

Source: Park, Y. S., Hicks, P. J., Carraccio, C., Margolis, M., Schwartz, A., & PMAC Module 2 Study Group. (2018, November). Does Incorporating a Measure of Clinical Workload Improve Workplace-Based Assessment Scores? Insights for Measurement Precision and Longitudinal Score Growth from Ten Pediatric Residency Programs, “Academic Medicine,” 93(115), S21–S29.



Students' Engagement with Electronic Health Records Over Time: Increasing Use, but Stagnant Entry

Use of electronic health records (EHRs) has increased dramatically in the United States over the past decade, and students are often presumed to have developed the underlying knowledge and skills associated with safe and effective EHR use in medical school. Yet, little is known nationally about student exposure to EHRs from their own perspectives.

To learn more, investigators surveyed 17,000 medical students graduating between 2012 and 2016 about how they used and entered information into electronic and paper health records during six core inpatient clinical clerkships. Although the mean percentage of inpatient clerkships in which students used an EHR increased from 78 percent to 93 percent during the study period, the degree to which students who used an EHR reported entering notes or orders remained constant.

Students entered notes during about one half of their clerkships with increases over time, and entered orders during less than one quarter of their clerkships with decreases over time.

While it's positive news that students are increasingly using EHRs in medical school, this study suggests that such use may be limited with respect to entering notes and orders, critical elements of graduate medical education and subsequent medical practice.

Source: Foster, L. M., Cuddy, M. M., Swanson, D. B., Holtzman, K. Z., Hammoud, M. M., & Wallach, P. M. (2018, November). Medical Student Use of Electronic and Paper Health Records During Inpatient Clinical Clerkships: Results of a National Longitudinal Study. "Academic Medicine," 93(11S), S14–S20.

VOLUNTEERS REPRESENTED **+240**
ORGANIZATIONS & INSTITUTIONS



Significant Contributions to Seminal Assessment Research

NBME staff publications and presentations contribute to the body of scholarship on assessment, explore emerging test constructs, and demonstrate the continuous reliability and validity of our existing examinations. A comprehensive list of those works can now be found under Research on [NBME.org](https://www.nbme.org). For those contributing to the body of knowledge about assessment, this list provides a useful starting point before doing a deep dive into the literature.

From the 1900s through the 2010s, staff members have made great contributions to the seminal research in assessment. The work is presented by decade, with an introduction that delineates the themes that emerged from that time period. Both the publications and presentations made at national and international conferences and meetings are included.

More information is online: [Research](#), [Staff Publications](#), and [Staff Presentations](#).



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FUELING OUR FUTURE

NBME engages with our stakeholders at numerous locations and venues for a wide variety of reasons. First, and foremost, our subject matter experts present research, participate in panel discussions, and teach workshops at conferences and association meetings. Through other opportunities, NBME staff can build on our base of collaboration, gather feedback, provide value to attendees, and demonstrate new services and features.

Here is a sampling of the places NBME staff visited in 2018:

- American Board of Medical Specialties (ABMS) Conference
- American Medical Student Association (AMSA) Convention and Exposition
- Association of American Medical Colleges (AAMC) Annual Meeting
- Association for Medical Education in Europe (AMEE) Conference
- Association of Pediatrics Program Directors (APPD) Annual Spring Meeting
- European Association of Test Publishers (E-ATP) Innovations in Testing Meeting
- CIEC International Congress of Health Sciences Meeting
- Conference on Empirical Methods in Natural Language Processing
- Council on Licensure, Enforcement & Regulation (CLEAR) Annual Education Conference
- Council on Medical Student Education in Pediatrics (COMSEP) Annual Meeting
- HLTH – The Future of Healthcare Event
- International Association of Medical Science Educators (IAMSE) Annual Meeting
- International Conference on Residency Education (ICRE) Meeting
- InterProfessional Care for the 21st Century Conference
- Institute for Credentialing Excellence (ICE) Annual Conference
- Latino Medical Student Association (LMSA) Conference
- International Association for Medical Education (AMEE) Ottawa Conference
- Pediatric Academic Societies Meeting
- Student National Medical Association (SNMA) Annual Medical Education Conference

View NBME @ Events for each month in [NBME.org](https://www.nbme.org).



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We want to work together to develop even better assessment tools for learning, measurement, and education as well as patient outcomes. Health professionals form the core of all assessments NBME administers. NBME staff members bring technical and measurement expertise to a process that relies upon health professionals for developing content, determining the examination blueprint, setting the standard for passing performance, and otherwise guiding the assessment process so as to reflect the values and priorities of the profession. This combination of measurement expertise and judgment of the profession form the critical elements of a high-quality assessment program.”

Staff commentary on continuing certification



OUR MISSION

To protect the health of the public through state-of-the-art assessment of health professionals. While centered on assessment of physicians, this mission encompasses the spectrum of health professionals along the continuum of education, training, and practice and includes research in evaluation as well as development of assessment instruments.



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