



DEVELOPING THE NEXT GENERATION OF PHYSICIANS

Throughout 2022, we engaged the medical education community to find out how we can best support developing the next generation of physicians. In this edition of *NBME Impact: A Community Report*, see some steps we're taking to do that through fairness, innovation, and the enhancement of skills and behaviors in assessment.

PROMOTING FAIRNESS IN MEDICAL EDUCATION AND MEASUREMENT

All future and practicing physicians deserve equitable opportunities to learn and demonstrate their knowledge, skills, and behaviors.

Utilizing the Power of Convening to Drive Systemic Change

Remediating systemic bias and discrimination requires collective commitment. In addition to doing our part to promote fairness and equity in our products and services, we have been engaging with the broader community of organizations to collaborate and convene on issues of equity in medical education, assessment, and measurement.

One of those organizations is the [Josiah Macy Jr. Foundation](#), a philanthropic foundation whose mission is to improve health by advancing the education and training of health professionals. The foundation has been providing grants and hosting a series of meetings to promote diversity, equity, and belonging in the health professions. These meetings have involved learners from historically marginalized communities, social scientists, organizational leaders, and health professions educators. The second meeting in a series took place in December 2022, focusing on "Ensuring Fairness in Medical Education Assessment." NBME is humbled and grateful to be represented in this space.

[Michael Barone](#), MD, MPH, Vice President of Competency Based Assessment, attended the meeting as a medical educator and representative for NBME. He reflected:

"The meeting provided the time and space for participants to envision systems-level changes that will advance equity, through numerous actions. On a personal level, the meeting provided me an opportunity to reflect on practices in assessment and grading in medical schools that I once viewed as routine yet now understand their serious negative impact on marginalized groups. On an organizational level, I'm excited about the opportunities this could bring to our work and collaboration with others on these important issues."

The recommendations and the commissioned papers for the 2022 conference will appear this year in *Academic Medicine*.

NBME is actively engaged in addressing issues of equity in the assessment field and is looking forward to its [Equity in Measurement and Assessment Conference](#) on April 25-26, 2023, in Conshohocken, Pennsylvania. This invitational conference will bring together measurement, assessment, medical education, and diversity, equity, and inclusion (DEI) experts to discuss and advance approaches that promote equity and alleviate bias in medical education assessment. The sponsors of the conference

are NBME, the American Board of Medical Specialties, the American Board of Internal Medicine, and the Association of American Medical Colleges.

The conference will include engaging plenary presentations and small group discussions, with topics addressing:

- Use of technology in item development and the impact on equity in assessment.
- Content development through the equity lens.
- Analyzing item bias in standardized assessments.
- Equity in curriculum.

New Initiative Advances Diversity in Measurement

To advance equity in the measurement profession, it's critical to develop educational pathways for diverse learners to enter assessment careers. That's why we're partnering with the [Center for Measurement Justice](#) (CMJ) to sponsor up to [two measurement justice fellowships](#) each year for the next two years.

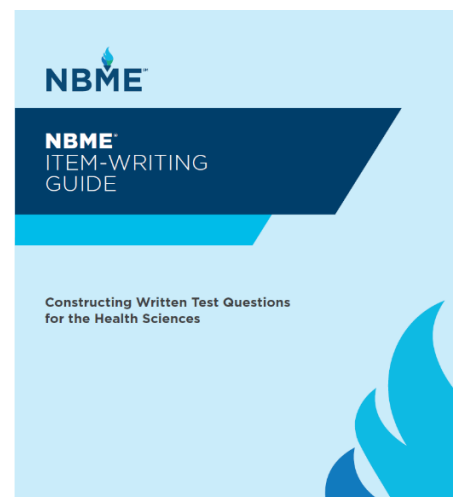
CMJ is dedicated to ensuring equity in measurement and assessment. The CMJ-NBME Fellowship Program is a competitive dissertation fellowship for members of racial and ethnic groups historically underrepresented in measurement. Fellows will receive a **\$30,000 stipend** and get to attend quarterly community of practice meetings offered by CMJ. They also have the opportunity to participate in optional NBME programming and research collaboration activities.

Sponsoring this fellowship continues NBME's long-term commitment of giving to support medical education and assessment research. Learn about other [NBME contributions and giving on NBME.org](#).

Incorporating Thoughtful Consideration of Patient Characteristics in Test Items

Thoughtful consideration of patient characteristics within test items can help prevent the perpetuation of harmful stereotypes. This is a prioritized area of focus for the Patient Characteristics Advisory Panel (PCAP), which was formed by the United States Medical Licensing Examination® (USMLE®) program. They aim to review representation across exams, inform item development practices related to the inclusion of patient characteristics, and provide feedback to USMLE governance on global recommendations, like ensuring that exam blueprints remain aligned with current DEI best practice.

If you're interested in learning more about PCAP, [Reena Karani](#), MD, MHPE, describes some of the committee's work on [NBME's Reassess the Future website](#). She also shares insights into the importance of addressing bias in assessment and the role NBME can play to support this critical work.



The [NBME® Item-Writing Guide](#) provides recommendations for appropriately including patient characteristics within case vignettes. Medical educators can use this [one-pager as an on-hand reference](#) for some of these considerations when creating items.

DEVELOPING LEADERSHIP AND EXPLORATIONS TO GUIDE INNOVATION

As the health care landscape continues to evolve, new and innovative assessment methods are needed to measure the competencies that are essential to patient care.

New Leader for Growth and Innovation of New and Existing Products and Services



Pamela Treves, MBA, was promoted to **Senior Vice President, Growth and Innovation**, leading the teams that will accelerate innovation of new and existing products and services. Treves joined NBME in 2017 as the Vice President, Marketing and Communications. Prior to NBME, Treves spent more than 20 years growing businesses and driving innovation and product development across companies and mission-driven organizations, such as Johnson & Johnson and ETS.

“I’m excited to join the Growth and Innovation team and explore how we can meet the changing needs of assessment and learning,” Treves said. “I believe that NBME has an important yet specific role to play in improving health care by supporting med-ed and health care professionals through our commitment to innovative and meaningful assessment and educational solutions – with the ultimate goal of better patient care.”

Growing Interest in AI and NLP in Medicine and Medical Education

With the advent of ChatGPT, a large language model developed by OpenAI, there have been growing conversations about the advancements of artificial intelligence (AI) programs and their intersectionality with medicine and medical education. If utilized correctly, these tools can have a positive impact on how assessments are built and how students learn.

Several studies have been conducted on the use of AI to answer multiple-choice test questions on medical knowledge. Some conversations about these studies seem to suggest that AI tools are correctly answering USMLE test questions. The USMLE program provides some additional context and a [response to these conversations on USMLE.org](#).

While AI has been the recent center of conversations regarding innovation, NBME has been exploring the use of natural language processing (NLP) capabilities to improve assessment for several years. Last year, we hosted a [Kaggle competition](#) to challenge data scientists and machine learning practitioners to further the development of automated scoring of clinical text. Anyone is able to access the winning Kaggle solutions, and interested researchers can apply for access to the full dataset for academic research purposes by submitting a proposal to [NBME’s Data Sharing portal on NBME.org](#). More information about the full dataset can be found in [this academic paper](#) by NBME staff.

On [ReassesstheFuture.org](#), you can watch a video of **Victoria Yaneva**, PhD, Senior Data Scientist, who explains how NLP can be used to improve teaching and learning. She also outlines the current challenges of applying this technology within health care and medical education.

ADVANCING ASSESSMENT OF SKILLS AND BEHAVIORS

We want to help ensure that future generations of physicians have not only the knowledge, but also the skills and behaviors needed to best treat patients.

Pilot Explores New Format to Assess Communications Skills

Future physicians need effective communication skills to build rapport and trust with patients, which can [positively impact](#) patient satisfaction, compliance, and outcomes. NBME is exploring new formats that can help assess this critical competency.

In fall 2022, **400 medical students** enrolled in a pilot organized by NBME researchers to practice communications skills. Participants engaged in communications tasks where they read a brief description of a patient's clinical circumstance, watched a short video of the patient speaking, and recorded a response as if directly speaking to the patient. Researchers are analyzing the study results and look forward to sharing more later this year.

Creative Community Works to Enhance OSCE Clinical Reasoning

To support learners in the development of clinical skills, [NBME's Creative Community](#) initiative is focusing on the enhancement of clinical reasoning assessment using school-based Objective Structured Clinical Examinations (OSCEs) through an evidence-centered design model. The Creative Community brought its early design and development work to the DOCS Annual Meeting and the AAMC's Learn Serve Lead conference in November 2022, inviting feedback from the broader medical education community as the new assessment begins to take shape. The collaborative work between NBME professionals and the Creative Community schools this year will focus on the design, development, and testing of assessment components to determine whether this innovative approach is able to assess and provide formative feedback on learners' clinical reasoning skills and behaviors.

Are you interested in learning about how educators view OSCEs, the ways OSCE programs are evolving, and the current challenges medical schools face when implementing? You can find an infographic that provides insights into these questions on [ReassessTheFuture.org](#).

SHARING NEWS FOR YOU

On Jan. 27, 2023, NBME's Board of Directors elected new officers and members. Positions elected include chair, vice chair, and treasurer, along with seven at-large members. This election was a historic moment for NBME, with Dr. Reena Karani being elected as the first woman of color to serve as chair in the organization's 108-year history. You can learn more about the [new board on NBME.org](#).

In early April, NBME will announce the recipient of the 2023 John P. Hubbard Award, which celebrates individuals who have made outstanding contributions to the field of assessment in medical education. You can look for that information on [NBME.org](#).

NBME thanks the diverse members who serve on our committees and task forces and help us fulfill our mission. You can see the full membership list in the 2022 [NBME](#) and [USMLE](#) Directories.

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- ▶ **Share your thoughts** on [Reassess the Future](#) to meet this moment in medicine together.
- ▶ **Find us** on LinkedIn at [NBME.org](#), follow us on Twitter [@NBMEnow](#), and like us on Facebook [@NBME.org](#).
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