



BROADENING NBME CAPACITIES FOR ASSESSMENT OF HEALTH PROFESSIONALS

In the March edition of this report, NBME chairperson **Al Tallia, MD, MPH**, [discussed his COVID-19 experiences](#) as an educator and physician; he noted that the medical education community was beginning to see a renaissance, both in “health care delivery and the assessment of it by NBME.” This edition of *NBME Impact: A Community Report* will illustrate how NBME has expanded its capabilities by working in cross-disciplinary ways, recalibrating USMLE® resources, fostering the future of medical education and reimagining its leadership.

COLLABORATING TO ADVANCE ASSESSMENT

Our collaborations and outreach help foster meaningful conversations to propel assessment in medical education forward.

Natural Language Processing: A Cross-Disciplinary Approach

NBME researchers like **Victoria Yaneva, PhD**, Senior Data Scientist, are looking for novel ways to use Natural Language Processing (NLP) in assessment for medical education. “NLP has potential to extract insight from text-based data,” Victoria said. This is valuable because most information in medical education is stored in text format. During this past summer’s Assessment Science and Psychometrics Internship program, NLP was top of mind to mentors and interns alike.

- ▶ Director of Test Development (TD) Innovations **Kimberly A. Swygert, PhD**, and TD Designer **Ian Micir** mentored Swati Padhee. Their work [resulted in a study](#) to assess whether NLP models would be helpful in detecting language patterns within a large set of patient vignettes that could identify stereotyping or outdated language.
- ▶ Senior Psychometrician **Rich Feinberg, PhD**, and Psychometricians **Francis O’Donnell, PhD**, and **Thai Ong, PhD**, mentored Merve Sarac who also applied NLP methodologies by using Topic Modeling and Sentiment Analysis on focus group feedback to improve a score-reporting dashboard.

NBME is certainly not alone in pursuing NLP to advance assessment. To spark new scholarly relationships and discussions, NBME hosted *NLP in Assessment* where more than **420** individuals from over **20** countries representing **230** organizations convened online. During the two-day conference, participants listened to the findings and research of over a dozen presenters, including keynote speaker Jill Burstein, PhD, (Duolingo); interacted with experts during poster sessions; and engaged in dialogue—at times even answering each other’s questions—concerning shared goals and topics that are critical to NLP experts across scientific communities. *NLP in Assessment* is an example of how convening diverse communities can help address assessment’s challenges and opportunities.

Inviting Candid Discussions: NBME’s 2021 Town Hall

Over **400** individuals representing more than **180** medical schools and organizations participated live or watched the [recording of NBME’s Nov. 4 Town Hall](#), “Collaborating for Change: Accelerating Progress in Medical Education Assessment.” In response to presentations by **Renee Gagliardi**, Director of Product Management; **Alex J. Mechaber, MD**, Vice President of USMLE; **Colleen Ward**, Senior Program Officer of USMLE; and **Amy Gilthorpe**, Manager of Outreach, participants engaged in a robust question-and-answer session. We encourage you to [access the answers to those questions](#) and watch the recording of the event on NBME.org.

REFINING THE USMLE EXPERIENCE

NBME continually works to improve the examinee experience that takes place before, during and after test day. Learn about two examples of this work below.

A Revitalized USMLE.org Website

An updated [USMLE website is now available](#) so examinees can more easily find information.

- ▶ Accessed more than **153,000** times since its launch in October, the site features clear pathways to apply for each Step exam, as well as improved search functionality. Whether examinees are preparing for a Step exam or applying to register for the first time, the refreshed site provides needed information and renders well on mobile phones, tablets and other devices. Visit [USMLE.org](#) now to explore the updated website.

Refreshed Computer-based Case Simulations Practice Materials on USMLE Step 3

- ▶ To expand the availability of free USMLE test materials for Step 3 examinees, [Computer-based Case Simulations \(CCS\) practice materials](#) can now be accessed on both PCs and Macs. Visited more than **8,000** times, the materials are web-based and no longer require downloading software. The new format also includes the ability to navigate more easily through the case simulations, offering a user-friendly experience. Feedback from pilot users described this option as faster, noting smoother screen transitions and increased ease when launching the CCS practice cases.
- ▶ Input from both you and your students is invaluable to improving this resource. Please consider providing feedback to help us elevate practice materials to an even more user-friendly experience. [Click here to participate in the post-experience survey.](#)

CONTINUING CONTRIBUTIONS FOR TOMORROW'S ASSESSMENT LEADERS

Empowering individuals with discrete and ongoing learning and professional development opportunities means that fresh eyes can improve assessment at any time, for the benefit of educators and their examinees.

NBME 2022 Invitational Conference for Educators (NICE)

Part of NBME's commitment to DEI is to work towards ensuring voices from all backgrounds, demographics and identities are represented. The NICE conference, which gathers medical educators from across the nation to discuss and learn about vital topics in the field, is an opportunity to demonstrate our commitment to DEI. Invitations sent to leaders of **190** allopathic and osteopathic medical schools encouraged recipients to deeply consider these values when selecting two faculty members from their institutions to attend the 2022 NICE Conference. Designed to promote discussion and learnings about creating meaningful tests for students, the fourth annual NICE Conference will be held both in person in Philadelphia and online on **June 14 and 15, 2022**.

Call for Applications: 2022 Assessment Science and Psychometrics Summer Internship

- ▶ [NBME's Summer Internship](#) program fosters the skills of burgeoning assessment researchers and scientists. Slated to be on-site for the first time in two years, NBME is currently accepting applications for this rigorous, rewarding learning opportunity. Applicants can [visit here](#) to learn about the research areas in focus for the upcoming session and submit their materials by **Jan. 31, 2022**.
- ▶ Since 2016, this eight-week program has provided mentorship to more than **20** individuals, two of whom, **Chris Runyon, PhD**, and **Su Somay, PhD**, are measurement scientists in NBME's Office of Research Strategy.

REALIGNING NBME LEADERSHIP TO STRENGTHEN CAPABILITIES

It is essential that NBME leadership reflects diversity in expertise, background, race, ethnicity, gender and identity to best serve our communities. Below, you can learn about [recent leadership changes and additions](#):

- ▶ **Ye Tong, PhD**, joins NBME as Senior Vice President of Assessment Operations. **Amanda Clauser, EdD**, has been selected as the Vice President of Psychometrics and Data Analysis.
- ▶ **Michael Jodoin, PhD**, has become Senior Vice President of Customer & Portfolio Management. **Alex J. Mechaber, MD**, has been promoted to Vice President of USMLE.
- ▶ **Daphne M. McRae, MBA**, has joined NBME as its inaugural Diversity, Equity and Inclusion Director.

Under the leadership of NBME President & CEO **Peter J. Katsufakis, MD, MBA**, NBME's Executive Team has been reconstituted to foster stronger strategic thinking and impact. This leadership collective includes:

- ▶ **Janelle Endres**, Vice President, Human Resources
- ▶ **Andy Farella, MS**, Senior Vice President, Chief Information Officer, Information Technology
- ▶ **Linda M. Gadsby, Esq.**, Senior Vice President, General Counsel and Chief Diversity, Equity and Inclusion Officer, Office of the General Counsel and Organizational Affairs
- ▶ **Jack Hinke**, Senior Vice President, Chief Financial Officer, Office of the CFO and Organizational Resources
- ▶ **Michael Jodoin, PhD**, Senior Vice President, Customer & Portfolio Management
- ▶ **Alex J. Mechaber, MD**, Vice President, USMLE
- ▶ **Elisa Moll, MSPH**, Vice President, Strategy Management
- ▶ **Lisa Rawding, MBA**, Senior Vice President, Growth and Innovation
- ▶ **Ye Tong, PhD**, Senior Vice President, Assessment Operations
- ▶ **Pamela Treves, MBA**, Vice President, Marketing and Communications

DEVELOPING FUTURE-FACING PROJECTS

In 2021, NBME staff and the communities with whom we collaborate made headway on several undertakings to keep pace with the renaissance unfolding across medical education. Next year, we expect to share progress on many of these initiatives, and the initial steps of brand-new ones. In future editions of this report, you can look forward to reading about:

- ▶ An enhanced **remote proctoring software** solution for NBME® Assessments;
- ▶ Explorations to understand the **clinical skills that matter to educators**, within and beyond USMLE;
- ▶ The 2021 **Stemmler Fund** recipients whose research confronts critical issues in assessment;
- ▶ Information about an NBME-hosted **NLP Kaggle competition**, an opportunity to find solutions to challenging problems using data science.

We wish you a peaceful and healthy close to 2021.

At any time of year, you can relay your needs while staying up to date on NBME's latest innovative solutions and initiatives. Start with these steps:

- ▶ **Share this report** within your professional and educational circles, and feel free to send us feedback about the content in this edition by emailing **Nicole Fortuna**, Manager of Strategic Communications, at nfortuna@nbme.org.
- ▶ **Find us** on LinkedIn [@NBME.org](https://www.linkedin.com/company/nbme), follow us on Twitter [@NBMENow](https://twitter.com/NBMENow) and like us on Facebook [@NBME.org](https://www.facebook.com/nbme.org).
- ▶ **Access [previous editions](#)** of this report to learn about NBME's efforts in other areas.