



Examiner

NBME 2009 Annual Meeting

On March 26-27, 2009, the NBME Membership met in Philadelphia for the 95th Annual Meeting. The 2009 Annual Meeting focused on two key resolutions, relating to the strategic future development of United States Medical Licensing Examination® (USMLE®) and a permanent commitment to international collaborations. These topics were introduced in two plenary sessions. The first plenary reviewed the history of the Comprehensive Review of the USMLE, the recommendations of the USMLE Composite Committee, and the likely trajectory of developmental work to implement them. The second key topic included presentations by a panel of distinguished international guests who described why each chose to collaborate with the NBME and the challenges and benefits of the working relationship. The panel included representatives from Dubai Healthcare City, Belgium and Portugal.

Following the plenary presentations and small group sessions on these topics, the members adopted resolutions providing for the following:

- Implementation of the recommendations regarding enhancements of USMLE, focusing the examination program on two decision points (at entry into supervised practice and at entry into unsupervised practice), adopting a competency framework for the design and scoring of USMLE, enhancing the integration of fundamental science throughout the examination sequence, and pursuing developmental activities to better assess clinical and communication skills and the ability to acquire and synthesize appropriate information in a clinical setting.
- Ending the pilot phase of International Collaborations and committing to ongoing international programs and services, with a particular emphasis on exploring the potential for a global credential related to fundamental knowledge for medical practice.

In his report, President Donald E. Melnick challenged the Membership to provide further definition of a role for the NBME in contributing to the national dialog on health system reform

that was identified at the 2008 Annual Meeting. During small group sessions and using an audience response system, the Membership identified high priority topics for NBME engagement in the forum of public policy development.

Small group discussion time usually dedicated to strategic planning was devoted to enhancing how members of the NBME communicate the "NBME message" in their roles as representatives and ambassadors of the NBME. This exercise in communicating about the NBME was a follow-up to more in-depth activities in which NBME Executive Board members participated at their October 2008 retreat.

In addition to NBME infrastructure, finances, management actions intended to assure fiscal health of the NBME during the economic recession, governance, and the topics described above, program-oriented small group discussions focused on Medical School and Student Services, USMLE and Clinical Skills Evaluation Collaboration, Post-licensure Assessment Services, Client Services, International Collaborations, Developmental Programs, and research and development and Center for Innovation. Members endorsed various actions of the Executive Board during plenary sessions.

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NBME Pandemic Preparedness and Response Planning

The NBME has been working on pandemic preparedness plans for several years. Planning activities were multi-faceted: a staff task force was formed to address internal issues; governance committees met to clarify processes to ensure prompt response and appropriate communication; and senior managers of NBME staff met with various representatives within the House of Medicine to discuss proposed plans and the potential ramifications on others.

The recent outbreak of the influenza A(H1N1) virus provided an opportunity to appraise levels of preparedness. Leadership of the organization kept careful watch as soon as the new strain of virus was discovered. When the World Health Organization (WHO) raised the alert status to level 5, NBME took the following actions:

- Announcements were posted on various NBME websites informing constituents and examinees that the NBME was monitoring the situation.
- Representatives of the Composite Committee and the USMLE parent organizations convened frequent conference calls to assess the ongoing situation and were prepared to take appropriate measures as warranted.

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The 2009 John P. Hubbard Award was presented to John J. Norcini, President of the Foundation for Advancement of International Medical Education and Research (FAIMER; see page 4).

The NBME also recognized G. Paul DeRosa, James A. Hallock, and James N. Thompson with a newly created special recognition award, celebrating their effective collaborative efforts with the NBME during their tenures at the American Board of Orthopaedic Surgery, the Educational Commission for Foreign Medical Graduates, and the Federation of State Medical Boards, respectively. Retiring Board members Bennett L. Leventhal, L.D. Britt, Bennett L. Johnson, Jr., James A. Hallock, Ramon Velez, Daniel W. Morrissey, and Stephen I. Schabel were presented with the Edythe J. Levit Distinguished Service Award.

The Membership elected the nominees presented by the Nominating Committee: W.T. Williams, Jr. to a second two-year term as Chair, Susan R. Johnson to a first two-year



W. T. Williams, Jr.



Susan R. Johnson



Lewis R. First

term as Vice Chair, Lewis R. First, to a first two-year term as Treasurer, Ruth-Marie E. Fincher to a second two-year term as Executive Board member, and Lynn M. Cleary, Christopher C. Colenda, II, Rubens J. Pamies, and Susan M. Spaulding to first two-year terms as Executive Board members. Cam E. Enarson, Darrell G. Kirch, and Louis N. Pangaro were elected to second four-year terms and Suzanne T. Anderson, Walter R. Frontera, Eric S. Holmboe, Ayse O. McCracken, Gaultiero W. Ricciardi, Lawrence G. Smith, Lesley J. Southgate, and Alison J. Whelan were elected to first four-year terms as at-large members of the NBME.

PROFILE >>

Michael Jodoin, PhD Appointed to NBME Staff



The NBME is pleased to welcome its new Associate Vice President, Dr. Michael Jodoin, to the NBME Scoring Services unit. Dr. Jodoin received a Bachelor of Education and Bachelor of Science in mathematics, and

Master of Education in education and measurement evaluation from the University of Alberta. Additionally, Dr. Jodoin earned his PhD in psychology from the University of Massachusetts.

Dr. Jodoin brings to the NBME a wealth of knowledge and experience in item response theory, research and statistical analysis. He has led teams focused on the development of scoring, test development and psychometric process. He has contributed to his field of expertise through research in measurement in educational testing, and has been published in journals including *The Journal of Educational Measurement* and *The Journal of Experimental Education*.

(NBME Pandemic Preparedness and Response Planning, continued from page 1)

- The USMLE website was updated to include specific information for examinees scheduled to take Step examinations during this time.
- NBME staff members contacted representatives from the health professional organizations for whom we provide examination services to keep them abreast of our activities and to ensure our ability to accommodate their plans.
- Staff from the NBME Medical School Services unit communicated with representatives from domestic and international medical schools in outbreak areas. The contacts were done to gather first-hand information about the situation at individual schools and to offer assistance with upcoming services.

- Each week, the NBME hosts a variety of meetings. From USMLE oversight committees to test material development or examination review committees, many basic scientists, clinicians, and faculty members travel to Philadelphia from across the country. When the alert status was raised, steps were initiated to contact each committee member personally to inform them of NBME plans.

The success of the overall response and communication outreach allowed constituents, examinees, and interested parties to be kept informed. The importance of developing a response plan before it was actually needed was underscored. Additional information gained through this experience will be used to modify internal response plans. The NBME will continue to work with external stakeholders to ensure appropriate collaboration in the event of a true pandemic.

NBME Research

Each year the staff of NBME participates in research intended to further understanding of key measurement issues, to advance the development of new testing formats and processes, and to provide evidence for the validity of decisions and inferences that are based upon examination outcomes. The following is a brief summary of some of the research activity conducted in the last year. Descriptions of other activities and lists of staff publications and presentations can be found in the NBME Annual Report at www.nbme.org.

Analysis of Performance Differences by Gender on USMLE Step Examinations

As part of an ongoing investigation of the relationship between USMLE performance and examinee characteristics that should be, for the most part, irrelevant to the constructs being measured by the Step examinations, staff continues to examine the relationship between examinee gender and performance on the Step exams, with an extension specifically to the Communication and Interpersonal Skills (CIS) component of Step 2 CS. Preliminary research indicates that there may be gender differences among performance on the three CIS subscales. Investigation into these differences continues.

Analysis of Step 2 CS Patient Encounter Time

Past research suggests that the amount of time allotted for each standardized patient (SP) station is adequate, but little is known about how examinees use their allotted time interacting with SPs. Staff continues to examine this topic through the review of samples of Step 2 CS videos. Descriptive statistics show that US medical school graduates tend to use less time in encounters than international medical graduates, and the first encounter of the day tends to be the longest one for all examinees. Hierarchical linear modeling (HLM) has been

used to assess the relationship between SP, case, and examinee variables with time used in the encounter. The results suggest a strong relationship between time used and whether the examinee is from an international or US medical school and with the particular case format, and a moderate relationship between time used and gender, examinee's English proficiency, and the age of the portrayed patient. Overall, data suggest that all examinees have sufficient time to complete encounters. None of the findings suggests problems with pacing or other validity issues. It is anticipated that additional data will be collected and analyzed to obtain a better understanding of how examinee time usage relates to exam scores.

Comparing the Effectiveness of Two Models for Equating a Large-Scale Standardized Performance Assessment

The equating method based on the Partial Credit Model (PCM) was compared to the equating method based on analysis of variance (ANOVA) in the context of a large-scale standardized medical performance assessment. In the first part of the study, PCM scores were calculated based on the real score data and compared to the ANOVA equated scores. Comparison showed PCM and ANOVA equated scores were highly correlated and the equating procedures reduced the amount of variability due to differences in cases and raters in a similar way. The second part of the study employed a simulation, in which observed scores for the ANOVA model were computed based on known true ANOVA scores. Again, the corresponding PCM scores were compared to true ANOVA scores and results from the first part of the study were confirmed. The possible advantage of the PCM equating method was the smaller proportional error of measurement for some PCM equating runs. Based on practical comparisons and simulation studies, findings indicate that the PCM serves as a viable theoretical and practical model for equating scores on a high-stakes performance assessment, despite the sparseness of score data and large scale of equating and scoring datasets.

Evaluating the Spoken English Proficiency of International Medical Graduates (IMGs) in a Performance-Based Clinical Skills Examination

The USMLE Step 2 CS exam utilizes standardized patients to assess IMGs spoken English proficiency (SEP). This study investigated the psychometric properties of the scores. SEP ratings were contrasted for various examinee cohorts and correlated with other internal and external measures. Performance of failing examinees who retook the exam was also investigated. As expected, native English speakers and women achieved higher SEP ratings. SEP was modestly related to interpersonal ability and weakly correlated with other exam measures. Most repeat examinees slightly improved their SEP scores. The results of this investigation support the validity of the SEP measure in the clinical skills examination.

The Impact of Repeat Information on Examinee Performance for a Large-Scale Standardized Patient Examination

The focus of this study was to assess the score gains made by repeaters on the USMLE Step 2 CS and quantify the impact on performance from repeat exposure of material. Study results suggest that examinees do not benefit from seeing a repeat of the same patient scenario in Step 2 CS. However, it was also noted that in order to ensure exam validity, exam material must be kept confidential, since research suggests that examinees who gain access to the specific scoring checklists or scoring scales for cases may gain an unfair advantage over those who do not.

John J. Norcini, PhD Receives the 2009 Hubbard Award



At its 2009 Annual Meeting, the NBME announced that John J. Norcini, PhD was selected as the recipient of the 2009 John P. Hubbard Award. The award is given to individuals who have made outstanding contributions to the pursuit of excellence in the field of evaluation in medicine. Ruth-Marie E. Fincher, Chair of the 2009 Hubbard Award Committee, announced Dr. Norcini's selection at the Annual Meeting of the NBME Membership on March 26, 2009.

In announcing the award recipient, Dr. Fincher stated: "John Norcini has made exceptional contributions to the field of measurement and evaluation in both medical education and education in general. John's outstanding scholarship, world-class reputation as a researcher and educator, magnitude of contributions, and longstanding involvement in the field of assessment are unparalleled. John has an outstanding record of fostering the development of evaluation methods and measurement tech-

niques. He was one of the first scholars to show a link between certification results and patient outcomes in practice. He discredited the use of essays as a reliable assessment method.

"Dr. Norcini was a pioneer in developing the mini-clinical examination exercise for assessing clinical skills, a peer-assessment tool (mini-PAT), and the concept of work-based assessment. The breadth of his research and development activities includes topics such as standard setting, scoring and rating methods, certification and recertification, item formats, item modeling, gender differences, written and computer-based examinations, essays, predictors of performance, standardized examinations, sources of measurement error, generalizability studies, score reproducibility, item response theory, testing time requirements, performance of foreign medical graduates, language proficiency, measurement of humanistic qualities and professionalism, cut scores and pass/fail decisions, performance and levels of expertise, profiles of clinical competence, performance feedback, and indicators of residency program performance. John is an accomplished and prolific scholar, with at least 144 publications in a wide variety of journals, 16 book chapters, and 142 invited presentations and workshops that cover a wide range of topics in measurement and evaluation. These accomplishments are a testimony to the breadth and depth of his talent in the field. His review articles regarding methods of criterion-referenced assessment and standard setting have defined the field, and he is in much demand internationally for his expertise in this area.

"John is a talented mentor and international promoter of medical education and evaluation, as exemplified by his work with the FAIMER institute. His tireless work to create critical masses of educational scholarship throughout the world is a very demanding job, with enormous travel demands, and really reflects a degree of altruism that is unmatched in our field.

"Colleagues describe John as a 'giant' in the field of medical evaluation. They note, 'Throughout this fantastic career, Dr. Norcini was a tireless developer, a bold innovator, a ferocious number cruncher, a prolific scholar, and most of all, a gentleman. There is no one more deserving of the Hubbard Award than John Norcini. He is a renaissance man of measurement and evaluation. Many of us work on specific areas of measurement. Few have the breadth and depth that Dr. Norcini has. He is one of a handful of psychometricians worldwide who truly knows the field inside out. It is difficult to think of anyone who is more deserving of the Hubbard Award. He is the epitome of the qualities enshrined in the Hubbard Awardees.'"

Dr. Norcini became the first President and Chief Executive Officer of the Foundation for Advancement of International Medical Education and Research in May 2002. Prior to joining FAIMER, he was Director of Psychometrics and Executive Vice President for Evaluation and Research at the American Board of Internal Medicine.

The NBME established the John P. Hubbard Award in 1983 in special tribute to the late John P. Hubbard. Honoring Dr. Hubbard as a principal, guiding force of the NBME, this award acknowledges his creative and inspired leadership of the organization during his 25-year tenure as its chief executive. Dr. Norcini deservedly joins the ranks of the distinguished individuals whom the NBME has honored over the years with this prestigious award.

Dr. Norcini's selection as the recipient followed a call for nominations published widely in the spring of 2008. The 2009 Hubbard Award Committee, chaired by Ruth-Marie E. Fincher, included as members Lynn M. Cleary, Antoinette F. Hood, Glenn Regehr, Carol Morrison, and Susan M. Spaulding.

INSIDE THE NBME >>

2009-2010 Stemmler Fund Call for Proposals

The Stemmler Fund's annual "Call for Proposals" (CFP) invites proposals from LCME- or AOA- accredited institutions. The goal of the Stemmler Fund is 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.

For the 2009-2010 application cycle, the NBME is implementing an additional pre-application step to the Stemmler Fund process. Applicants will be invited to submit brief Letters of Intent describing the proposed research. Following a round of review, a subset of applicants will be invited to submit full proposals to be considered for funding. For full details, please see the Call for Letters of Intent, which will be available in June 2009 at www.nbme.org.

2008-2009 Grantees

University of Michigan
Principal Investigator: Dr. Linnea Hague
Grant Amount / Duration: \$149,963 / 2 years
Project Title: Assessing Medical Student Performance on Phone Consultations with Nurses: A Validity and Feasibility Study

Vanderbilt University
Principal Investigator: Dr. Joshua Denny
Grant Amount / Duration: \$150,000 / 2 years
Project Title: Automated Assessment of Clinical Portfolios to Determine Geriatric Competency for Medical Students

IN MEMORIAM >>

Bernett L. Johnson, Jr., MD



With deep sadness, the NBME shares the news that Bernett L. Johnson, Jr., MD passed away on April 3, 2009. Dr. Johnson was Vice Chair of the NBME. Quoting his obituary, Dr. Johnson was "one of the most respected and beloved physician-educators and administrators at the Hospital of the University of Pennsylvania and the School of Medicine," receiving HUP's first Edward S. Cooper Humanitarian Award in 2005.

Highlights of his medical career include the following: As a student, Dr. Johnson attended Meharry Medical College, where he graduated with his medical degree in 1957. Commissioned in the US Navy Medical Corps in 1958, his postgraduate training included a number of dermatology programs. He was board-certified by the American Board of Dermatology in 1965. After retiring as a 27-year veteran of the US Navy Medical Corps, he came to Philadelphia's Graduate Hospital in 1980 as associate chair of dermatology and became a clinical professor at Penn. In 1984, he joined the standing faculty as associate professor of dermatology. From 1993 to 1995, he served as interim chair of the department. Dr. Johnson was Senior Medical Officer for HUP and Senior Associate Dean for Diversity and Community Outreach. Previously, he had also served as Senior Associate Dean for Veterans' Affairs. His dedication and service to medicine and outstanding teaching skills were noted

throughout his career and recognized with many honors. He was one of the editors of a classic textbook in his field, *Lever's Histopathology of the Skin*.

Dr. Johnson was involved in many organizations. A sample of his NBME contributions included service as a member of the Hubbard Award Committee, Nominating Committee, Center for Innovation Advisory Committee, Clinical Skills Evaluation Collaboration Operations Oversight Group, and membership on a number of other committees. He was a member-at-large of the NBME before being elected to the NBME Executive Board in 2001 and becoming Vice Chair in 2005.



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