NBOME'S VISION IS TO BE THE GLOBAL LEADER IN ASSESSMENT FOR OSTEOPATHIC MEDICINE AND RELATED HEALTH CARE PROFESSIONS

LEADING THE WAY

2012 | ANNUAL REPORT

NBOME
NATIONAL BOARD OF OSTEOPATHIC MEDICAL EXAMINERS

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2012 MESSAGE FROM THE BOARD CHAIR AND THE PRESIDENT

MESSAGE FROM

Janice A. Knebl, DO, MBA and John R. Gimpel, DO, MEd

Blazing new trails, meeting new challenges, setting the course for where we want to be in the future and doing what it takes to get there – these are all ways in which the National Board of Osteopathic Medical Examiners (NBOME) sought in 2012 to achieve our vision of being the global leader in assessment for osteopathic medicine and related health care professions.

As we did our part in 2012 to "Lead the Way" in the area of osteopathic assessment, we were honored and proud to work in close cooperation with our many partners to achieve our mutual goals and objectives. Like the NBOME, our collaborators have one or both of the following objectives as fundamental to their mission – to improve the quality of the osteopathic medical profession and to protect the public.

In addition to our twenty-three-member Board of Directors, the NBOME is comprised of more than 90 full-time employees, hundreds of part-time and contracted professionals, and a diverse and talented National Faculty that numbers more than 800. We are all very proud of their accomplishments, and it is therefore our pleasure to share with you the highlights of what was a truly historic year. Thank you for your interest.

Perhaps the most significant achievement of 2012 was the completion, approval and implementation of the NBOME's five-year strategic plan, *Directions for the Future: 2012-2016*, which provides the framework for further realizing our vision. The development process was led by the dynamic NBOME Board, and was informed by input and research from key NBOME stakeholder groups. In addition, the NBOME's staff played an important role in providing its input, and ensuring the broad and overarching vision could be made real on a daily basis.

"Perhaps the most significant achievement of 2012 was the completion, approval and implementation of the NBOME's five-year strategic plan, Directions for the Future: 2012-2016, which provides the framework for further realizing our vision."

For 79 years, the NBOME has focused on osteopathic competency assessment and testing services. In analyzing the current dynamic environment of health care assessment, along with the NBOME's history and core competencies, the Board and stakeholder groups issued two directives from which emerged our *Directions for the Future: 2012-2016*.

- The first was to continue to build and strengthen the NBOME's core products and services, which are all competency assessment services in nature: COMLEX-USA, COMAT, COMVEX, COMSAE, and numerous client examinations for board certification, resident in-service examinations, and related assessment tools. Many of the initiatives outlined in the plan, such as performance excellence, collaboration, and engaging the workforce, are foundational to this directive.
- The second is global expansion of products and services to allow the osteopathic medical profession and the public to better benefit from them, and the NBOME as a resource, both across the osteopathic medical education, training and lifelong practice continuum, and into the international arena.

The melding of the two directives – NBOME's entrusted competency assessment services, and the added-value proposition of providing these services to others within the profession and potentially in the international arena – guided the development of a set of initiatives that assist and enhance how the NBOME serves as a key resource for the public and the profession.

Another important initiative that is helping to lead the way in the further development and continuous quality improvement of osteopathic assessment products and services is the NBOME's National Faculty Transformation, begun in 2012 with full implementation set for 2013. This effort significantly raises the bar in the areas of credentialing and engaging subject matter experts from across the country. The NBOME is grateful to the more than 800 highly qualified and committed professionals that comprise this most elite group, including so many osteopathic physicians and other professionals who give of their time and expertise to assist the NBOME in meeting our mission.

Many leaders across the profession have requested that the NBOME expand assessment

2012 MESSAGE FROM THE BOARD CHAIR AND THE PRESIDENT

services into the formative arena to serve as a resource for continuous professional development (CPD). In late 2011 and in early 2012, in response to these expressed needs, the NBOME Department of Innovations in Testing expanded into the Department of Continuous Professional Development and Innovations (CPDI).

The NBOME's CPDI team is even better positioned to serve as a resource for physician assessment, not only for practice performance improvement, but also to meet the requirements of the American Osteopathic Association's (AOA) new Osteopathic Continuous Certification (OCC) program, and the Federation of State Medical Boards' Maintenance of Licensure (MOL) initiatives.

Osteopathic physicians around the county are now talking about NBOME's Osteopathic Performance and Assessment Improvement Modules – OPAIM™ – which are designed specifically to meet requirements for the AOA's OCC. With a great deal of development effort made in 2012, two prototype modules were expected to be available starting in April, 2013.

The pages of this annual report will provide further information about COMLEX-USA, the globally acknowledged examination series designed for osteopathic physician licensure, as well as many other accomplishments and developments. We would like to note a few important ones here:

- NBOME's Blue Ribbon Panel on Enhancing COMLEX-USA published its Fundamental Osteopathic Medical Competency Domains report as an educational supplement in the *Journal of the American Osteopathic Association*, and continues its work on refining the components of the proposed new two-decision point format.
- The NBOME completed its transition to comprehensive electronic score reporting in 2012, an initiative that has been very favorably received by examinees and schools alike.
- Beginning its second full academic year in 2012, NBOME's COMAT subject examination program quickly became the gold standard in end-of-clerkship/clinical rotation testing for osteopathic medical students.

"The pages of this annual report will provide further information about COMLEX-USA, the globally acknowledged examination series designed for osteopathic physician licensure."

- COMSAE, the online Comprehensive Osteopathic Medical Self-Assessment Examination, has continued to grow in use by osteopathic medical schools and students, principally for self-assessment and readiness evaluation for COMLEX-USA.
- A number of specialty colleges and specialty boards rely on the NBOME as their partner in delivering assessment services, with most now adopting computer-based testing methodologies. The majority of residents in the osteopathic graduate medical education (GME) programs across the United States now take residency in-service examinations that are developed by their specialty college in partnership with the NBOME, including the following specialties: family practice, surgery, internal medicine and emergency medicine, with the American College of Osteopathic Pediatricians signing on for services beginning in 2013.
- The National Residency Matching Program (NRMP) published its residency program director survey in 2012, confirming NBOME research that the majority (77 percent) of residency programs accredited by the Accreditation Council for Graduate Medical Education (ACGME) use COMLEX-USA scores in evaluating DO applicants to

their programs. Additional research has added to validity evidence for that purpose, and NBOME and AOA initiatives have helped program directors to learn more about COMLEX-USA.

- The AOA and the NBOME work together on a number of other educational initiatives for the profession, very significantly in the international arena, where Canada and Australia as well as 62 other jurisdictions now recognize American-trained DOs.

and Association of Osteopathic Directors and Medical Educators (AODME) joined the NBOME to discuss protecting the quality of patient care and osteopathic distinctiveness in an era of significant change, including full implementation of the federal Affordable Care Act, the growing shortage of GME slots and implications of the proposed unified GME accreditation announcement, in addition to well-documented anticipation of physician shortages across the U.S.

Unanimous consensus from the leaders in attendance confirmed the following statement: "Patients are best served by seeking care from osteopathic physicians who have qualified by virtue of passing competency assessments for licensure designed for the practice of osteopathic medicine and validated for that distinct purpose." (Please see page 15 for more detail on the Summit.)

"Together with our other colleagues across the house of medicine, we assure the public that we are there for them in honoring our commitment to quality medical education, training and patient care."

Finally, of great importance was the October, 2012 announcement by the AOA, the American Association of Colleges of Osteopathic Medicine (AACOM) and the ACGME of the possible development of a memorandum of understanding to merge accreditation standards for all GME in the United States under the umbrella of the ACGME, possibly by July 2015. In the context of these tri-lateral discussions, the AOA confirmed and the ACGME agreed that certain elements critical to osteopathic distinctiveness were "non-negotiable." These included the NBOME's COMLEX-USA examinations for osteopathic licensure, osteopathic college accreditation by the Commission on Osteopathic College Accreditation (COCA), and osteopathic speciality board certification.

On the heels of this announcement, and in recognition of the many challenges and changes facing health care education, delivery and access across the U.S., NBOME leadership sought to help align leaders across the profession by organizing the first "U.S. Osteopathic Medical Regulatory Summit 2012," held in Philadelphia in December.

Key leaders from the AOA, AACOM, COCA, AOA-Bureau of Osteopathic Specialists (AOA-BOS), American Association of Osteopathic Examiners (AAOE)

In the words of former President John F. Kennedy, "Leadership and learning are indispensable to each other." The NBOME salutes and thanks its Board of Directors as well as all of its staff, National Faculty members, and the countless leaders from our stakeholder groups and across the profession who are learning and leading together in a dynamically changing world. In particular, we applaud the many leaders of the AOA and the AACOM who have worked tirelessly this particular year to advocate both for the profession and quality patient care. Together with our other colleagues across the house of medicine, we assure the public that we are there for them in honoring our commitment to quality medical education, training and patient care.

—Janice A. Knebl, DO, MBA, Board Chair
—John R. Gimpel, DO, MEd, President & Chief Executive Officer

NBOME 2012 TIMELINE

JANUARY

>>> The NBOME was represented at the 22nd annual Osteopathic Medical Education Leadership (OMEL) Conference, co-sponsored by the American Osteopathic Association (AOA) and the American Association of Colleges of Osteopathic Medicine (AACOM) in early January. In attendance were Board Chair Janice A. Knebl, DO, MBA; Vice Chair Wayne Carlsen, DO; numerous other NBOME Board members, including Secretary/Treasurer John W. Becher, DO; and NBOME staff members including NBOME President & CEO, John R. Gimpel, DO, MEd.

>>> On January 31, the NBOME hosted a meeting of the Federation of State Medical Boards' (FSMB) Pentalateral Group on Maintenance of Licensure, which in addition to the NBOME, is made up of the FSMB, AOA-Bureau of Osteopathic Specialists (AOA-BOS), the American Board of Medical Specialties (ABMS) and the National Board of Medical Examiners (NBME).

>>> Erik Langenau, DO, was appointed as NBOME's first Vice President for Continuous Professional Development & Innovations. Previously Dr. Langenau served as NBOME's Vice President for Clinical Skills Testing.

>>> NBOME President & CEO John R. Gimpel, DO, MEd, provided a comprehensive update for employees about the NBOME's strategic planning initiative.

>>> The NBOME Information Technology (IT) Division announced a project to upgrade NBOME's technology infrastructure in an effort to reduce operational and capital costs, improve disaster recovery capabilities and improve efficiency.

>>> The NBOME announced the signing of a lease and plans to expand its Philadelphia offices by taking over 5,200 square feet of office space on the first floor of the 101 West Elm Street building.

February - Coalition for Physician Accountability meeting

March - NOAC sponsorship event

FEBRUARY

The NBOME hosted the second gathering of the Coalition for Physician Accountability, a partnership of ten medical organizations that are working together to promote the professional quality and accountability of physicians across the medical education, training and practice continuum, February 13, at its Chicago Corporate Offices. NBOME Board Chair, Janice A. Knebl, DO, MBA, led the NBOME delegation, joined by immediate past chair John E. Thornburg, DO, PhD; Secretary/ Treasurer John W. Becher, DO; Senior Vice President for Cognitive Testing Gerald Osborn, DO, MPhil; and NBOME President & CEO John R. Gimpel, DO, MEd.

Dr. Gimpel provided an NBOME and COMLEX-USA Update during the Midyear Meeting of the American Osteopathic Association (AOA) Board of Trustees Meeting in Miami, Florida, on February 29. He presented NBOME's initiatives to support the AOA-Bureau of Osteopathic Specialists with formative assessment tools that were being designed specifically for the AOA's Osteopathic Continuous Certification (OCC) program.

Members of the Case Development Committee (CDC) for the COMLEX-USA Level 2-Performance Evaluation (PE), representing 15 different colleges of osteopathic medicine, participated in a meeting February 24-25. During the meeting Dr. Bruce Bates, CDC Chair from 2008 to 2011 and a member since its inception, received special recognition for his sustained contributions.

Dr. Gimpel and NBOME Vice President for Administration & COO Larry Turner visited the Philadelphia College of Osteopathic Medicine (PCOM), where they provided an NBOME/COMLEX-USA Update.

The NBOME's strategic planning process continued to move forward in February, with NBOME employees asked to provide their feedback on the newly proposed Core Values.

MARCH

The NBOME was well represented at the American Association of Colleges of Osteopathic Medicine (AACOM) Annual Meeting in Washington, DC. NBOME Board Chair Janice A. Knebl, DO, MBA; Vice Chair, Wayne Carlsen, DO; accompanied by NBOME President & CEO, John R. Gimpel, DO, MEd, led a discussion session with the AACOM Board of Deans on March 29. Dr. Gimpel, Dr. Knebl and Larry Turner attended the general meeting of AACOM's Council of Student Government Presidents (COSGP) and conducted a question-and-answer session. For the seventh consecutive year, the NBOME hosted the NBOME Update Luncheon.

At the AACOM Annual Meeting, AACOM President Stephen Shannon, DO, MPH, announced that the NBOME would be its first-ever Sustaining Diamond Sponsor. The five-year agreement begins in 2013.

Representatives from the NBOME joined more than 1,200 DO students and physicians in the AOA's annual "DO Day on Capitol Hill" in Washington, DC, on March 8.

On March 9, Dr. Gimpel and NBOME Vice President for Administration & COO, Larry Turner, provided an update on NBOME activities for the 100-member house of delegates of the Student Osteopathic Medical Association (SOMA).

The NBOME also announced its sponsorship of "The NBOME Executive Reception" area at the American Osteopathic Association's (AOA) National Osteopathic Advocacy Center (NOAC), the AOA's office and the osteopathic medical profession's home in Washington, DC.

Three senior leaders represented the NBOME at the Ottawa Conference, an international forum for the discussion of topics related to competence assessment, in Kuala Lumpur, Malaysia. Attending from NBOME were Gerry Osborn, DO, MPhil, Senior Vice President for Cognitive Testing; Erik Langenau, DO,

March - Get Your Rear in Gear, Philadelphia

April - NBOME Luncheon at AACOM

April - 2011 Annual Report

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Vice President for Continuous Professional Development and Innovations; and Linjun Shen, PhD, MPH, Vice President for Cognitive Testing & Research.

>>> The NBOME 2011 Item Writers and Case Author of the Year were announced. Item Writers of the Year included Kenneth Hentschel, DO, PhD; Kathy LePard, PhD; Steven Perkins, DO; Michelle DeVoe, DO; Meredith Davison, PhD, MPH; and Jan Hendryx, DO. Case Author of the Year was John Hohner, DO.

>>> Dr. Gimpel and Mary Foerstch, PhD, NBOME Director of Test Development, provided a "Multiple Choice Question Examination Item-Writing Workshop and NBOME Update" for residency program directors at the American College of Osteopathic Family Physicians' (ACOFP) program directors workshop in Orlando, FL. Dr. Gimpel also served as a delegate for the ACOFP Congress of Delegates.

>>> NBOME staff from the Philadelphia office participated in the "Get Your Rear in Gear" race/walk events on March 18 as part of the NBOME's employee wellness program. The event also raised funds to support colon cancer research.

APRIL

>>> The NBOME's 2011 annual report, titled "A Clear Vision Being Realized," was published and introduced at two key stakeholder events – the annual meetings of the Association of Osteopathic Directors and Medical Educators (AODME) and the Federation of State Medical Boards (FSMB).

>>> Board Vice Chair Wayne Carlsen, DO, and Senior Vice President for Cognitive Testing Gerald Osborn, DO, MPhil, represented the NBOME at the AODME Annual Meeting April 25-28 in Louisville, Kentucky.

>>> The NBOME was a Gold Sponsor of the FSMB Annual Meeting and Centennial Celebration, held April 26-28 in Fort Worth, Texas. Board Chair Janice A. Knebl, DO, MBA, and President & CEO John R. Gimpel, DO, MEd, updated meeting attendees on NBOME activities, featuring COMLEX-USA and COMVEX. Drs. Knebl and Gimpel presented a commemorative plaque honoring the FSMB's 100 years of service to the public to FSMB Chair Janelle Rhyne, MD, and President and CEO Humayun Chaudhry, DO, at the FSMB Annual Awards Luncheon.

>>> While in Fort Worth for the FSMB meeting, the NBOME also made an "NBOME Update" presentation to the American Association of Osteopathic Examiners (AAOE), which was holding its annual meeting in conjunction with the FSMB meeting.

>>> The NBOME's Fundamental Osteopathic Medical Competency Domains 2011 document was published as a supplement to the *Journal of the American Osteopathic Association's* special osteopathic medical education edition.

>>> Jeanne M. Sandella, DO, became NBOME's new Vice President for Clinical Skills Testing.

>>> The NBOME participated in a consultation review of the Professional and Linguistic Assessments Board (PLAB) Test for the United Kingdom's General Medical Council (GMC). Dr. Gimpel and Dr. Sandella completed the review of the test.

>>> Dr. Gimpel and Dr. Langenau represented the NBOME on the FSMB Maintenance of Licensure (MOL) Pentalateral Group conference call.

MAY

>>> Members of the Blue Ribbon Panel (BRP) on Enhancing COMLEX-USA met in Philadelphia under the direction of NBOME Board Chair, Janice A. Knebl, DO, MBA.

>>> An expert panel of DOs and additional health professionals – including PhDs, RNs and others – convened at the Philadelphia offices of the NBOME in early May to assist in

June - Santucci Award

June - NBOME staff, Mid-year Board meeting

setting standards for the Humanistic Domain of the COMLEX-USA Level 2-Performance Evaluation.

>>> The NBOME was represented at the American Educational Research Association (AERA) and National Council on Measurement in Education (NCME) Meeting in Vancouver, British Columbia, Canada. Representatives of the NBOME's Clinical Skills Testing and Cognitive Testing departments presented seven papers.

>>> The NBOME introduced the availability of online bulk purchase of COMSAE – the Comprehensive Osteopathic Medical Self-Assessment Examination – in response to requests from a number of the colleges of osteopathic medicine. Previously, the process had been handled manually.

JUNE

>>> The NBOME's Board of Directors convened its Mid-Year Meeting at NBOME's Chicago Corporate Offices and Conference Center, and had numerous opportunities to interact with NBOME staff. At the meeting, the NBOME Strategic Plan 2012-2016 was approved.

>>> The Clinical Skills Testing Advisory Committee (CSTAC) for COMLEX-USA Level 2-Performance Evaluation met at the NBOME's Executive Offices in Philadelphia, while the Cognitive Testing Advisory Committee (CTAC) met at the same time in Chicago. A portion of the agenda, common to both meetings, was conducted via videoconference between the offices – an NBOME first.

>>> A policy change to limit the number of times a candidate can take any of the COMLEX-USA examinations was approved by the Board. The following language was added to the COMLEX-USA Bulletin of Information in July 2012. NOTICE of PLANNED CHANGE to POLICY: Effective July 1, 2016, candidates taking COMLEX-USA examinations will be limited to a total of six (6) attempts for each examination (COMLEX-USA Level 1, Level 2 CE, Level 2 PE and Level 3),including but not limited to all attempts prior to July 1, 2016. After June 30, 2012, no candidate will be allowed to take any examination more than six (6) times without obtaining approval from the NBOME.

>>> Former Vice President for Cognitive Testing & Research Linjun Shen, PhD, MPH, was honored with the NBOME Santucci Award, the organization's highest honor, at the Board Dinner on June 22.

>>> Crystal Wilson, MEd, Managing Director for the NBOME's National Center for Clinical Skills Testing (NCCST), was named Interim Assistant Vice President for Human Resources (HR).

>>> Don Montrey, Coordinator for Standardized Patient (SP) Training at the NBOME's National Center for Clinical Skills Testing (NCCST), and Amy Spinelli, Assistant Director at the NCCST, attended the 11th Annual Association of Standardized Patient Educators Conference, June 3-6, in San Diego, California. Don and Amy gave a well-attended presentation on "Finding (and Keeping) the Best SPs."

>>> NBOME's Department of Cognitive Testing held its staff retreat on June 27.

JULY

>>> NBOME leaders were on hand for the American Osteopathic Association (AOA) Annual Meeting and at meetings of the AOA's Board of Trustees and House of Delegates, July 16-22 in Chicago.

>>> During the AOA meeting, the House of Delegates unanimously endorsed existing policy to reaffirm that NBOME examinations are the only licensure examinations shown to be valid for osteopathic physicians. In addition, the AOA Board

June - Mid-year Board meeting

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approved an official voting position on the Bureau of International Osteopathic Medical and Educational Affairs (BIOMEA) for an NBOME-nominated representative. NBOME President & CEO, John R. Gimpel, DO, MEd, was appointed to this position.

>>> NBOME President & CEO John R. Gimpel, DO, MEd, updated the AOA Board of Trustees on NBOME activities and initiatives. Dr. Gimpel also presented an NBOME Update to approximately 70 student leaders from the Council of Student Government Presidents (COSGP).

>>> Joseph Cruitt, MBA, CPA, became the NBOME's new Vice President for Finance and Chief Financial Officer.

>>> The NBOME provided further information on its research and development of Osteopathic Performance Assessment and Improvement Modules (OPAIM™) to the American Osteopathic Association (AOA) Board of Trustees. The OPAIM™ program is being developed to assist the AOA-Bureau of Osteopathic Specialists (AOA-BOS) and the osteopathic medical profession in providing meaningful, osteopathically distinct, cost-effective, and convenient formative assessment tools to support requirements for continuous professional development for osteopathic physicians, particularly those being established by the AOA-BOS for Osteopathic Continuous Certification (OCC). The NBOME continues development of two prototype OPAIM™ titles, developed at the request of AOA-BOS specialty certification boards to demonstrate OPAIM™ functionality and ease-of-use. Other anticipated uses of OPAIM™ titles may be for Federation of State Licensing Boards' (FSMB) maintenance of licensure pilots and for competency assessment in residency training programs.

>>> In an official address on the congressional floor for the U.S. House of Representatives, Representative Joseph Heck, DO, who represents Nevada's Third U.S. Congressional District, recognized NBOME Secretary/Treasurer John W. Becher, DO, of Philadelphia for the many outstanding accomplishments of his career, including Dr. Becher's longstanding and substantial contributions to the NBOME.

>>> Jeanne M. Sandella, DO, Vice President for Clinical Skills Testing, met with Ann Jobe, MD, Executive Director of Clinical Skills Evaluation Collaboration (CSEC) in Philadelphia. The CSEC is a collaborative effort between the Educational Commission for Foreign Medical Graduates (ECFMG) and the National Board of Medical Examiners (NBME).

>>> Erik Langenau, DO, Vice President for Continuous Professional Development & Innovations, met with Stephen Shannon, DO, MPH, President & CEO, American Association of Colleges of Osteopathic Medicine (AACOM); Carol Aschenbrener, MD, Chief Medical Education Officer, Association of American Medical Colleges (AAMC); and Robert Galbraith, MD, Director of the Center for Innovation, National Board of Medical Examiners (NBME) to explore opportunities for collaboration on sharing data for research and reporting purposes.

>>> After one full year, more than 16,000 COMAT subject examinations had been administered. During the 2011-2012 academic year, 19 colleges of osteopathic medicine (COMs) tested using COMAT, the majority for end-of-clerkship/clinical rotation student assessment. All 19 renewed for 2012-2013, with several additional COMs also signing on for 2012-2013.

AUGUST

>>> The American Osteopathic Association's (AOA) Board of Trustees voted to bestow a Distinguished Service Certificate on NBOME Immediate Past Chair, John E. Thornburg, DO, PhD. The award would be presented at the AOA's annual Osteopathic Medical Conference and Exposition in October.

>>> The NBOME joined the nine other organizational members

July - COSGP meeting

August - AOA Distinguished Service Certificate

September - *Directions for the Future*

of the Coalition for Physician Accountability for its semi-annual meeting in Philadelphia at the national offices of the Educational Commission for Foreign Medical Graduates (ECFMG). NBOME Board Chair Janice A. Knebl, DO, MBA; Secretary/Treasurer John Becher, DO; and President & CEO John R. Gimpel, DO, MEd, represented the NBOME.

>>> A conference call of the NBOME National Faculty leadership was held on August 27. This included all current Level Coordinators, Vice Coordiantors, and Examination Chairs. Agenda items included the NBOME's Strategic Plan 2012-2016 and the Transformation of the NBOME National Faculty.

>>> Dr. Gimpel and the NBOME Vice Presidents met in Philadelphia for their annual Leadership Retreat and were joined by the other members of NBOME's Senior Leadership Team on August 29 for their quarterly meeting.

SEPTEMBER

>>> The NBOME Executive Committee met in Charleston, South Carolina.

>>> The American Osteopathic Association (AOA) and its Council on Continuing Medical Education (CCME) announced the NBOME, in partnership with the American College of Osteopathic Family Physicians (ACOFP), as one of seven Category 1 AOA CME sponsors selected to receive a $5,000 grant to develop "CME on the Internet" pilot programs.

>>> NBOME Board Chair Janice A. Knebl, DO, MBA and NBOME President & CEO John R. Gimpel, DO, MEd, made a presentation at the Regulators Forum at the 2012 Osteopathic International Alliance (OIA) Annual Meeting. The presentation focused on maintenance of licensure and revalidation in the health professions internationally. In addition, Dr. Gimpel delivered a plenary presentation on physician competency domains for the OIA's Annual General Meeting, which included osteopathic physicians and osteopaths from around the world, as well as physician leaders from the World Health Organization.

>>> Electronic score reporting (ESR) for the COMLEX-USA Level 2-Performance Evaluation began on September 12. The NBOME announced it would be implementing ESR for the COMLEX-USA cognitive examinations in early October.

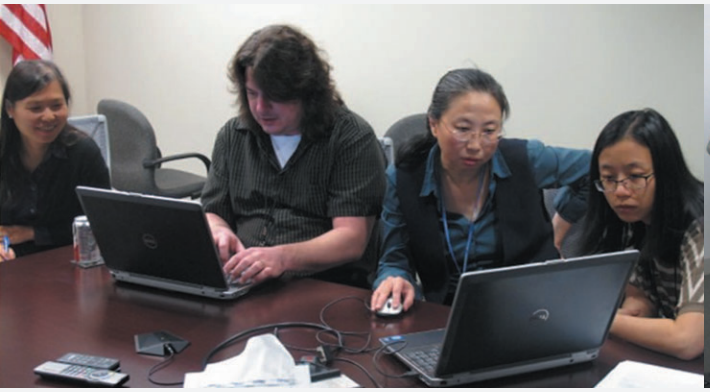
>>> The NBOME's ongoing Continuous Professional Development and Innovations Department (CPDI) activities continued in September with two events. On September 8, the CPDI Case Development Committee hosted its first case development workshop in Philadelphia, and the department hosted the Continued Fitness for Practice Task Force Meeting in Chicago, September 11-12.

>>> NBOME Vice President for Administration & COO, Larry Turner, attended the annual meeting of the Administrators in Medicine (AIM), Eastern and Southern Region, in Boston. AIM includes staff leaders from the state licensing boards.

>>> NBOME staff participated in the Association of American Medical Colleges' (AAMC) semi-annual meeting of the Electronic Residency Application Service (ERAS) in Washington, DC, in September. ERAS reports COMLEX-USA scores as well as links to updated information on how to interpret them for residency program directors.

>>> The American Osteopathic Association (AOA) held a joint meeting of its Bureau on Federal Health Programs & Bureau of State Government Affairs on September 20 at its National Osteopathic Advocacy Center in Washington, DC. Larry Turner, NBOME Vice President for Administration & COO, represented the NBOME, along with NBOME Board member, Geraldine O'Shea, DO.

>>> The NBOME's Communications Division produced a new brochure about the NBOME's Strategic Plan 2012-2016 titled "Directions for the Future."



October - Electronic score reporting

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OCTOBER

>>> The NBOME was a Bronze Sponsor of the 10th International Conference on Medical Regulation, hosted by the International Association of Medical Regulatory Authorities (IAMRA) October 2-5, in Ottawa, Ontario, Canada.

>>> For the fourth consecutive year, the NBOME was invited to present at the Annual Meeting of the Medical Council of Canada (MCC), also held in Ottawa. NBOME President & CEO John R. Gimpel, DO, MEd, presented MCC officials with a commemorative plaque honoring their 100 years of protecting the public at MCC's 100th anniversary black-tie gala.

>>> A delegation of NBOME leaders attended the American Osteopathic Association's (AOA) 117th Annual Osteopathic Medical Conference & Exposition (AOA OMED).

>>> At AOA's OMED, the AOA's Board of Trustees presented a Distinguished Service Certificate – its highest award – to NBOME Immediate Past Chair John E. Thornburg, DO, PhD, October 8, at the opening session of the conference. The AOA noted Dr. Thornburg's substantial contributions to the NBOME and his "20-year history of leadership…and overall dedication to improving the continuum of osteopathic medical education."

>>> The NBOME served as a sponsor of the Advocates for the American Osteopathic Association (AAOA) "Still Fit for Life 5K Fun Run," which was held during OMED. Drs. Knebl and Gimpel were out in front for the 6:00 am workout.

>>> The NBOME publicly launched the NBOME National Faculty Transformation with the announcement of 34 leadership positions in addition to the expanded Resident Recruitment Program and Item Writer opportunities. More than 1,000 qualified professionals from across the country expressed their interest in response to National Faculty Transformation recruiting efforts.

>>> Jeanne M. Sandella, DO, Vice President for Clinical Skills Testing, and colleagues and co-authors, NBOME consultant Jack Boulet, PhD, and Erik Langenau, DO, Vice President for Continuous Professional Development & Innovations, published a paper titled "An Evaluation of Cost and Appropriateness of Care as Recommended by Candidates on a National Clinical Skills Examination" in the international journal *Teaching and Learning in Medicine*.

>>> In an effort to raise understanding and awareness of the test accommodations processes and policies for college staff responsible for supporting students, the NBOME held a webinar on issues related to the Americans with Disabilities Act Amended. It was delivered on three occasions in October.

>>> The National Center for Clinical Skills Testing (NCCST) hosted a Center Visitation Day October 19. Representatives from colleges of osteopathic medicine and state medical boards were in attendance.

>>> Hao Song, PhD, joined the NBOME as Senior Director for Psychometrics and Research, Department of Cognitive Testing.

>>> Due to Hurricane Sandy, the largest storm to hit the northeast United States in more than 100 years, the COMLEX-USA Level 2-Performance Evaluation was cancelled for the first time since its inception. NBOME staff worked diligently and proactively to reach all those affected by the storm in order to re-schedule COMLEX-USA examinations.

>>> On October 21, the NBOME's Chicago staff participated in the Chicago edition of the "Get Your Rear in Gear" run/walk event.

>>> Following the announcement of a proposed unified accreditation system for graduate medical education, the NBOME worked in conjunction with the American Osteopathic Association (AOA), the American Association of Colleges of Osteopathic Medicine (AACOM) and others, to provide information regarding the importance of osteopathically distinctive assessment, particularly the COMLEX-USA licensure examination series.

>>> NBOME employees wore their denim to work as a part of Lee

December - Osteopathic Medical Regulatory Summit

December - Santucci Award

National Denim Day, helping raise more than $500 to fight cancer.

NOVEMBER

>>> NBOME President & CEO John R. Gimpel, DO, MEd, attended the American Osteopathic Association (AOA) Bureau on International Osteopathic Medical Education and Affairs' (BIOMEA) Strategic Planning Retreat in Phoenix, Arizona.

>>> NBOME Vice President for Administration & COO Larry Turner attended the Administrators in Medicine (AIM) "Institute Educational Workshop: Physician Licensing and Technology," held in New Orleans, LA.

>>> The American Association of Medical Colleges (AAMC) held its annual meeting in San Francisco, CA, November 2-8, with many NBOME staff and leaders in attendance.

>>> The COMLEX-USA Composite Committee met in the NBOME's Philadelphia Executive Offices.

>>> Members of the Blue Ribbon Panel (BRP) on Enhancing COMLEX-USA met via conference call.

DECEMBER

>>> The Annual Meeting of the NBOME Board of Directors was held December 7-8, in Philadelphia. This culminated a year in which NBOME's Board held meetings in both of NBOME's national offices, with each meeting providing an opportunity for Board Members to interact with NBOME staff.

>>> The first United States Osteopathic Medical Regulatory Summit, organized and hosted by the NBOME, was held as part of the Annual Board Meeting. The Summit brought together leading osteopathic organizations for discussions on issues vital to the future of osteopathic medicine. They included the American Osteopathic Association (AOA), AOA Bureau of Osteopathic Specialists (BOS), American Association of Colleges of Osteopathic Medicine (AACOM), American Association of Osteopathic Examiners (AAOE), AOA Commission on Osteopathic College Accreditation (COCA), and Association of Osteopathic Directors and Medical Educators (AODME).

>>> Anita Showalter, DO, Assistant Dean of Clinical Sciences and Associate Professor and Chair, Women's Health at the Pacific Northwest University of Health Sciences in Yakima, Washington, was elected and installed as an NBOME Board member. With the addition of Dr. Showalter, the NBOME Board is now comprised of more than 40 percent women.

>>> During the Annual Meeting of the Board in Philadelphia, the NBOME presented its highest honor, the Santucci Award, to past NBOME Board Chair, Sheryl Bushman, DO. Dr. Bushman was the first woman to serve as NBOME Chair, holding the position from 2005 to 2007, and currently serves as NBOME COMAT-Obstetrics & Gynecology Chair.

>>> The NBOME announced that Bruce Bates, DO, would be its new Senior Vice President for Cognitive Testing, based in NBOME's Chicago offices and beginning work in March 2013. Dr. Bates was selected by the Board to fill the position after a six-month national search.

>>> The NBOME recognized staff members in December for their contributions to various charitable causes. Among them: staff in Philadelphia, who helped with generous donations to the Laurel House in support of victims of domestic violence; and staff in Chicago, who made generous donations to the Salvation Army's Angel Tree program, which provides gifts to families in need. A number of NBOME employees also supported the Red Cross and the U.S. Military in a letter-writing campaign for deployed soldiers, and/or made contributions to the American Cancer Society for breast cancer research. Staff was also recognized for its support of victims of Hurricane Sandy.

December - New Board member installed

December - Annual Board meeting

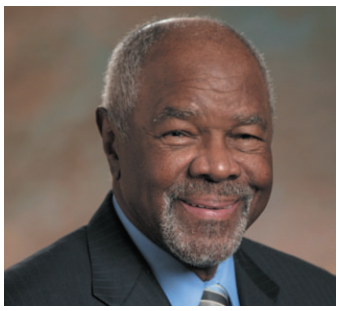
2012 NBOME BOARD MEMBERS

Janice A. Knebl, DO, MBA
Executive Committee Member,
Board Chair
Fort Worth, Texas

Wayne R. Carlsen, DO
Executive Committee Member,
Vice Chair
Athens, Ohio

John W. Becher, DO
Executive Committee Member,
Secretary/Treasurer
Newtown Square, Pennsylvania

John E. Thornburg, DO, PhD
Executive Committee,
Immediate Past Chair
Okemos, Michigan



William G. Anderson, DO
Detroit, Michigan

James M. Andriole, DO
Tallahassee, Florida

Bruce Bates, DO
Biddeford, Maine
(Outgoing Dec. 2012)

Susan Belanger, PhD, RN
Silver Spring, Maryland

Lori Kemper, DO, MS
Glendale, Arizona

Rich LaBaere, II, DO, MPH
Grand Blanc, Michigan

Michael K. Murphy, DO
Hattiesburg, Mississippi

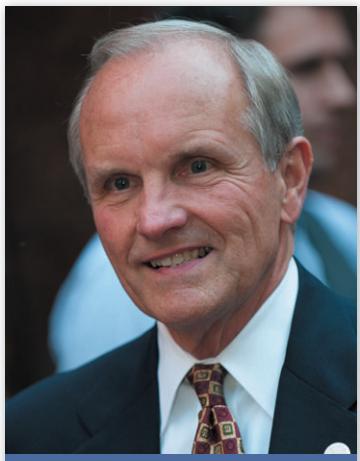
Deborah Pierce, DO, MS
Fort Washington, Pennsylvania

Millicent King Channell, DO, MA
Executive Committee Member
Philadelphia, Pennsylvania
(Outgoing EC Dec. 2012)

Geraldine T. O'Shea, DO
Executive Committee Member
Jackson, California

(Appointed to EC Dec. 2012)

Dana C. Shaffer, DO
Executive Committee Member
Des Moines, Iowa



Gary L. Slick, DO, MA
Executive Committee Member
Tulsa, Oklahoma

Ronald R. Burns, DO
Winter Park, Florida

Gary Clark
Jefferson City, Missouri

H. Timothy Dombrowski, DO, MPH
Stratford, New Jersey

J. Michael Finley, DO
Pomona, California

Anita Showalter, DO
Yakima, Washington
(Elected Dec. 2012)

Karen Snider, DO
Kirksville, Missouri

Roberta Wattleworth, DO, MHA, MPH
Des Moines, Iowa

OSTEOPATHIC LEADERSHIP CONVENES FOR HISTORIC UNITED STATES OSTEOPATHIC MEDICAL REGULATORY SUMMIT

Leaders of the osteopathic medical profession gathered in historic Philadelphia, Pennsylvania, on December 8, 2012, for the first United States Osteopathic Medical Regulatory Summit, hosted by the National Board of Osteopathic Medical Examiners (NBOME). The Summit united key players from the osteopathic medical regulation community – those entrusted with osteopathic physician assessment, undergraduate medical education, graduate medical education, licensure and certification – to discuss issues critical to delivery of high quality health care and the osteopathic medical profession.

Serving as impetus for the gathering were a number of significant developments, including recent proposed changes to osteopathic graduate medical training and accreditation, future requirements for osteopathic continuous certification, and most important, the future health care needs of the American public resulting from full implementation of the Affordable Care Act (ACA).

"This is an era of unprecedented change to many aspects of health care delivery as well as medical education and training," explained Janice A. Knebl, DO, MBA, NBOME Board Chair. "Motivated by this and the ever-increasing need for qualified physicians – particularly in primary care and under-served areas across the country – we gathered to discuss how to respond as a profession, and what our respective organizations will do to advance quality osteopathic patient care in the context of this changing environment."

"At a time when a rapidly aging population and expanded access to health care coverage are having a significant impact on the demand for physicians, the osteopathic medical profession remains committed to delivering health care to those who need it the most," said Ray E. Stowers, DO, President of the American Osteopathic Association. "With an emphasis on prevention and patient-centered care, osteopathic medical graduates are well equipped to deliver primary care in communities that have few options for medical services. In fact, more than 60 percent of osteopathic physicians currently practice family medicine, internal medicine, pediatrics or obstetrics and gynecology, while new osteopathic medical schools are offering instruction in some of the most rural and medically underserved regions of the country, ranging from Harlem to Appalachia to the Pacific Northwest."

REPRESENTATIVES OF THE OSTEOPATHIC PROFESSION IN ATTENDANCE AT THE SUMMIT INCLUDED:

- **American Osteopathic Association (AOA):** Ray E. Stowers, DO, President; John B. Crosby, JD, Executive Director; Linda L. Mascheri, Director of the Department of State, Affiliate, and International Affairs; Boyd R. Buser, DO, AOA Trustee
- **AOA Bureau of Osteopathic Specialists (AOA-BOS):** Stephen M. Scheinthal, DO, Chair; Ronald E. Ayres, DO, Past Chair
- **American Association of Colleges of Osteopathic Medicine (AACOM):** Stephen Shannon, DO, MPH, President; Lori Kemper, DO, Board of Deans member
- **American Association of Osteopathic Examiners (AAOE):** Dana Shaffer, DO, President; Geraldine O'Shea, DO, Vice-President; James Andriole, DO, Past-President
  Note: The AAOE represents the osteopathic physician members of the Federation of State Medical Boards, whose member organizations grant licenses for doctors of osteopathic medicine (DOs) at the state level.
- **AOA Commission on Osteopathic College Accreditation (COCA):** Thomas A. Cavalieri, DO, Chair; Sandra Featherman, PhD, Vice Chair; Konrad Miskowicz-Retz PhD, CAE, Secretary
- **Association of Osteopathic Directors and Medical Educators (AODME):** Richard LaBaere, II, DO, MPH, President; J. Michael Finley, DO, Board Member; Gary L. Slick, DO, Board Member

> *This is an era of unprecedented change to many aspects of health care delivery as well as medical education and training.*
>
> *—Janice A. Knebl, DO, MBA, NBOME Board Chair*

They joined the 23 members of the NBOME Board of Directors, led by Dr. Knebl and Vice Chair, Wayne Carlsen, DO, and other members of the NBOME executive staff.

A poll of participants during the Summit revealed widespread consensus on the following statement: "Because of the substantial contributions of osteopathic medicine to health care and the entire house of medicine in America over the last 138 years, a distinctive osteopathic medical profession is valuable to the health of the American public."

Indeed, a review of the mission statements of all participating organizations showed the common threads of protecting the public through the distinctive practice of osteopathic medicine.

During the Summit, each leader was asked to consider what role their organization can play to help advance high quality osteopathic patient care in the United States. John R. Gimpel, DO, MEd, President and Chief Executive Officer, responded on behalf of the NBOME:

"At the NBOME, we believe strongly that patients are best served by seeking care from osteopathic physicians who have qualified by virtue of passing graduation requirements and competency assessments designed for the practice of osteopathic medicine and validated for that distinct purpose. That is why the NBOME is committed to providing the highest quality evaluation tools to assess osteopathic medical students, residents and physicians."

Leaders from the participating organizations likewise agreed with the need for osteopathically distinctive and valid assessment tools in qualifying osteopathic physicians along the education, training and practice continuum.

COMLEX-USA®

National Board of Osteopathic Medical Examiners

COMLEX-USA is the NBOME's examination series that provides the pathway to licensure for osteopathic physicians in the United States. It is also recognized in many international jurisdictions. The development and administration of the COMLEX-USA series requires the expertise, hard work, intellect and dedication of the many NBOME staff members, as well as our highly qualified and committed NBOME National Faculty, which includes committee members, item writers, case authors, raters, etc.

The COMLEX-USA examination series encompasses both cognitive testing and clinical skills testing. Cognitive testing is delivered via computer by the NBOME's testing partner, Prometric, at hundreds of testing sites around the United States and in Canada. Clinical skills testing is conducted at the NBOME's National Center for Clinical Skills Testing in Philadelphia. Post-examination surveys of candidates indicate high degrees of satisfaction with the COMLEX-USA series, particularly with respect to examination administration. The NBOME regularly assesses candidate feedback as a means to improve all aspects of the COMLEX-USA series.

This section of the annual report summarizes the key data and developments related to the COMLEX-USA series in 2012.

The Comprehensive Osteopathic Medical Licensure Examination of the United States – COMLEX-USA

PATHWAY TO LICENSURE

- COMLEX-USA Level 1
- COMLEX-USA Level 2-Cognitive Evaluation
- COMLEX-USA Level 2-Clinical Skills Evaluation
- COMLEX-USA Level 3

The COMLEX-USA examination series is designed to assess the osteopathic medical knowledge and clinical skills considered essential for osteopathic generalist physicians to practice osteopathic medicine without supervision.

COMLEX-USA Cognitive Examinations

The chart below represents candidate performance on the COMLEX-USA cognitive examinations. These are COMLEX-USA Level 1, Level 2-Cognitive Evaluation (CE) and Level 3. The information presented represents complete testing cycles, which run mid-year to mid-year. (The 2012-2013 cycle results will be reported in the 2013 NBOME annual report.)

CANDIDATE PERFORMANCE ON COMPUTER-DELIVERED COMLEX-USA COGNITIVE EXAMINATIONS

	YEAR	N 1st Exam/Total Exams	PASSING RATE 1st Exam	PASSING RATE Total Exams
LEVEL 1	2007-2008	3656/4238	90.0%	86.2%
	2008-2009	3775/4408	89.6%	84.9%
	2009-2010	4237/4927	89.6%	85.8%
	2010-2011	4611/5428	87.6%	83.7%
	2011-2012	4853/5429	91.8%	89.4%
LEVEL 2-CE	2007-2008	3588/4196	90.6%	86.9%
	2008-2009	3369/3805	92.0%	88.9%
	2009-2010	3807/4783	82.6%	77.5%
	2010-2011	4195/5134	86.5%	82.1%
	2011-2012	4569/5465	86.8%	82.9%
LEVEL 3	2006-2007	3173/3770	87.7%	84.2%
	Dec. 2007- Jan.2009*	3798/4341	91.1%	88.4%
	2009-2010	3503/3934	91.9%	89.3%
	2010-2011	3660/4136	91.4%	88.4%
	2011-2012	4357/4741	95.0%	92.8%

*A 14-MONTH PERIOD IS LISTED AS A RESULT OF A CHANGE IN THE TESTING CYCLE.

COMLEX-USA Level 2-Performance Evaluation

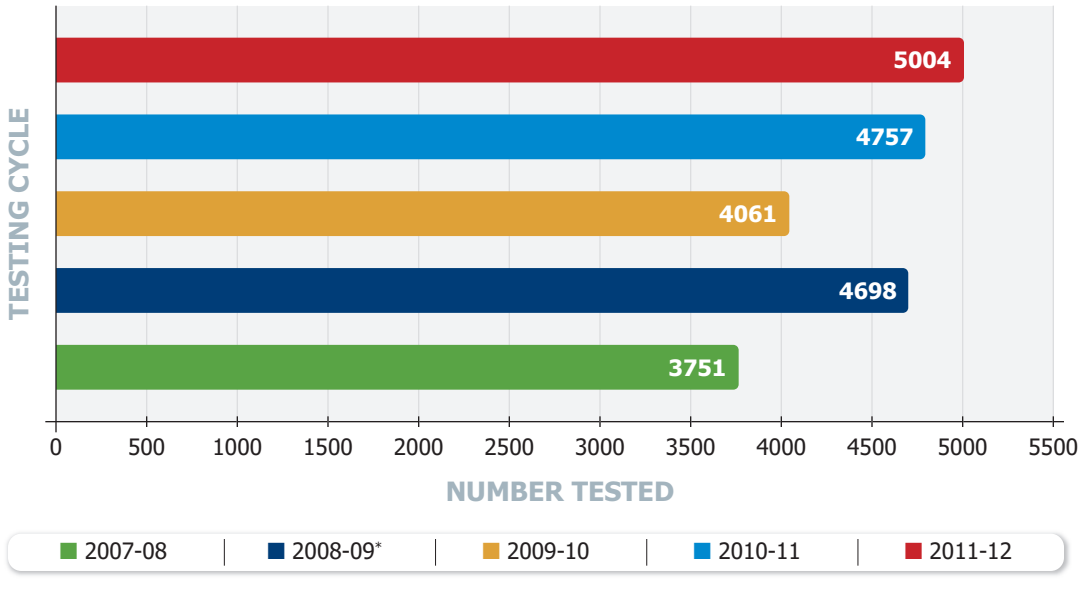
THE DATA SHOWN BELOW INCLUDES HISTORICAL INFORMATION AS A MEANS TO ILLUSTRATE TRENDS.

The total number of candidates who took the COMLEX-USA Level 2-Performance Evaluation for each of the five testing cycles from 2007-2012 is shown in the chart below. This cohort includes both first-time takers and repeat takers.

The number of COMLEX-USA Level 2-PE examinations administered in the most recent cycle – 5,004 – is the largest number in a cycle since the inception of the National Center for Clinical Skills Testing in 2004. It surpasses the 4,698 examinations administered in the 2008-09 cycle, and represents a five percent (247) increase over the previous year. While the growth rate was lower than in the 2010-11 cycle, the overall trend continues to move up.

NUMBER OF CANDIDATES TESTED ACROSS TESTING CYCLES 2007-08 THROUGH 2011-12

COMLEX-USA LEVEL 2-PERFORMANCE EVALUATION

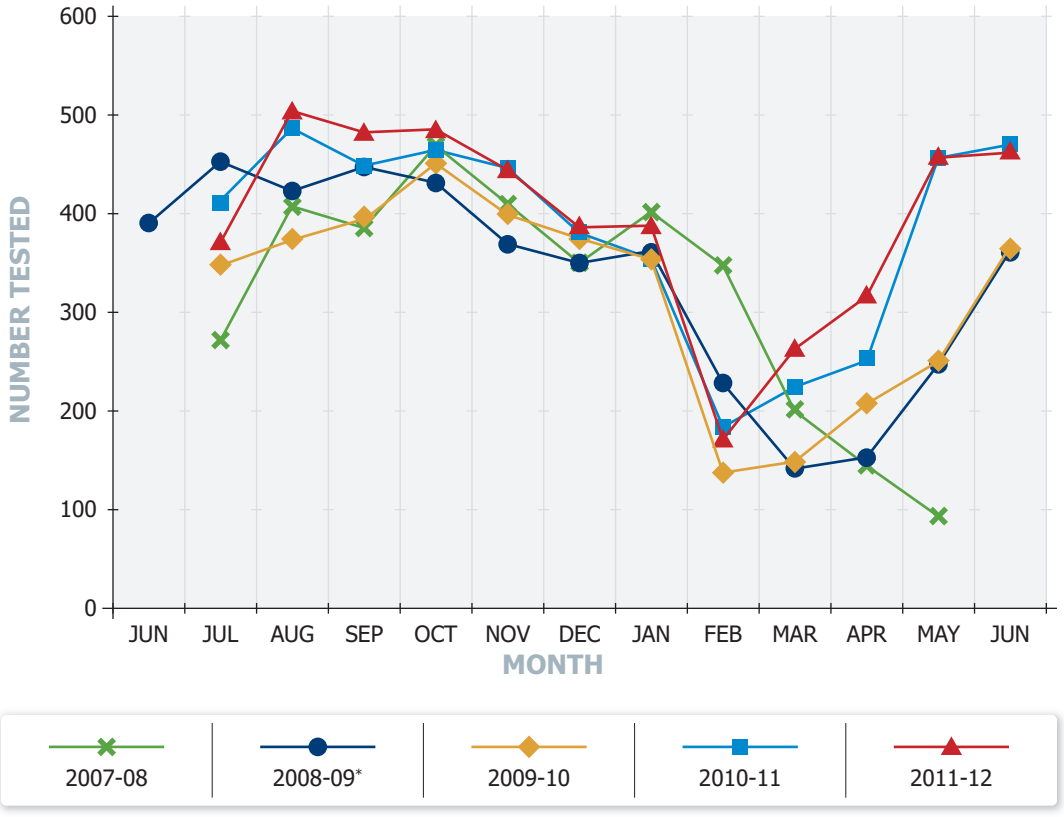


*A 13-MONTH PERIOD IS LISTED AS A RESULT OF A CHANGE IN THE TESTING CYCLE.

The most recent testing cycle began in July 2011 and finished in June 2012. As shown in the graph below, the most active months of testing are August, September and October while the least active are February and March.

FIRST-TIME TAKERS

COMLEX-USA LEVEL 2-PERFORMANCE EVALUATION



YEARLY TRENDS IN THE NUMBER OF FIRST-TIME TAKERS BY TESTING CYCLE AND MONTH ARE SHOWN IN THE GRAPH ABOVE

*A 13-MONTH PERIOD IS LISTED AS A RESULT OF A CHANGE IN THE TESTING CYCLE.

2012 COMLEX-USA EXAMINATION SERIES

The COMLEX-USA Level 2-Performance Evaluation consists of two domains: humanistic (physician-patient communication, interpersonal skills, and professionalism) and biomedical/biomechanical (osteopathic principles and osteopathic manipulative treatment, history-taking and physical examination skills, integrated differential diagnosis and clinical problem-solving, written communication and synthesis of clinical findings).

Consistent with many other national high-stakes examinations for physician licensure worldwide, the NBOME follows industry-standard best practices in determining pass/fail standards for its COMLEX-USA examinations, and for periodic resetting of the standards. Periodic review and resetting of the pass/fail standards for COMLEX-USA examinations ensures the standards of osteopathic medical licensure assessment reflect current medical education and medical practice.

In May 2012, two panels of osteopathic physicians and other subject matter experts convened at the NBOME's National Center for Clinical Skills Testing in Philadelphia to review the standards for the Humanistic Domain of the examination. The NBOME Board reviewed their recommendations along with other stakeholder survey data and implemented a new pass/fail standard for this domain in July 2012.

The table on the right shows the pass/fail rate for first-time takers by testing cycle, with additional data on each of the domains.

PASS/FAIL RATE FOR FIRST-TIME TAKERS BY TESTING CYCLE

COMLEX-USA LEVEL 2-PERFORMANCE EVALUATION

		N	%A	%B
2007-2008	PASS	3249		93.5
	FAIL	227		6.5
	Humanistic Domain	121	53.3	3.5
	Biomedical Domain	83	36.6	2.4
	Both Domains	23	10.1	0.7
	GRAND TOTAL	**3476**		
2008-2009*	PASS	4124		94.7
	FAIL	229		5.3
	Humanistic Domain	115	50.2	2.6
	Biomedical Domain	81	35.4	1.9
	Both Domains	33	14.4	0.8
	GRAND TOTAL	**4353**		
2009-2010	PASS	3644		94.8
	FAIL	199		5.2
	Humanistic Domain	105	52.8	2.7
	Biomedical Domain	76	38.2	2.0
	Both Domains	18	9.0	0.5
	GRAND TOTAL	**3843**		
2010-2011	PASS	4385		96.1
	FAIL	179		3.9
	Humanistic Domain	105	58.7	2.3
	Biomedical Domain	59	33.0	1.3
	Both Domains	15	8.4	0.3
	GRAND TOTAL	**4564**		
2011-2012	PASS	4513		95.0
	FAIL	236		5.0
	Humanistic Domain	156	66.1	3.3
	Biomedical Domain	60	25.4	1.3
	Both Domains	20	8.5	0.4
	GRAND TOTAL	**4749**		

A Total fail rate is the base for calculating percentages. **B** Total tested is the base for calculating percentages.

*A 13-MONTH PERIOD IS LISTED AS A RESULT OF A CHANGE IN THE TESTING CYCLE.

REPORTS FROM THE NBOME DEPARTMENTS

The NBOME Cognitive and Clinical Skills Testing Departments, working in conjunction with hundreds of National Faculty members across the country and supported by the many administrative staff in the client services, communications, technology, human resources and finance, work to achieve our mission of protecting the public by providing the means to assess competencies for osteopathic medicine and related health care professions. The NBOME creates examinations that reflect the comprehensive integration of the distinctive fundamentals of osteopathic medicine within osteopathic medical education, training and practice.

THE FOLLOWING DEPARTMENTAL AND DIVISIONAL LEADERS HAVE PROVIDED SUMMARIES:

Jeanne M. Sandella, DO
Vice President for Clinical Skills Testing

Bruce Bates, DO
Senior Vice President for Cognitive Testing

Erik Langenau, DO
Vice President for Continuous Professional Development and Innovations

Crystal Wilson, MEd
Interim Assistant Vice President for Human Resources, Managing Director for Clinical Skills Testing

Margaret Wong
Client Services Manager

Mary Coyle, MJ
Director for Communications

Steve Basile, MBA
Director for Information Technology

Joseph Cruitt, CPA, MBA
Vice President for Finance & Chief Financial Officer

CLINICAL SKILLS TESTING

In 2012, the Department of Clinical Skills Testing made great strides toward our vision while continuing to develop and administer the COMLEX-USA Level-2 Performance Evaluation, the clinical skills assessment for the COMLEX-USA series that is valid, reliable and fair.

COMLEX-USA Level 2-Performance Evaluation (PE)

In the 2011-2012 testing cycle, 5,004 candidates took the COMLEX-USA Level-2 PE at the NBOME's National Center for Clinical Skills Testing (NCCST) in the greater Philadelphia, PA region. This represents a five percent increase from the previous test cycle, and almost double the number of candidates tested in the 2004-2005 test cycle (2,742). Test cycles are opened every October following communication with eligible students and college administration. On October 1, 2012, seats for the 2013-2014 testing cycle were made available for scheduling. Additional test sessions are provided throughout the year to accommodate candidate demand.

Beginning with the 2012-2013 testing cycle, candidate score reports for the COMLEX-USA Level 2-PE were made available online for candidates and school representatives. (Previously, only the pass-fail result was available online.) This initiative provides faster and more convenient access to information for our candidates, including an expanded score report for failing candidates.

Occasionally, a candidate fails the examination due to misrepresentation of clinical findings on his or her SOAP Notes. The NBOME is the only high-stakes testing organization that issues a failing score report to a candidate for this reason. In 2012, three candidates failed the COMLEX-USA Level 2-PE due to this irregular conduct. This follows a decreasing trend, and may be due to the NBOME's extensive presentation and publication on misrepresentation.

Performance Excellence

In January 2012, deans were informed that the NBOME will transition to exclusive keyboard entry for SOAP Notes for the COMLEX-USA Level 2-PE starting July 1, 2014.

Throughout much of 2012, the NCCST developed and began implementing a new enhanced software program to support all aspects of the COMLEX-USA Level 2-PE administration, from candidate registration through scoring and quality assurance. It is scheduled to go live in 2013. In addition, this software will allow for a smooth transition to the electronic SOAP Note (eSOAP), to be used beginning in July 2014. eSOAP will be a means for computer keyboard entry of the post-encounter SOAP Notes for the Level 2-PE examination, and an instructional module is expected to be available on NBOME's website by January 2014.

The East Coast was hit with "Superstorm" Sandy on October 29-30, 2012. In the interest of our candidates' and staff safety, the unprecedented decision was made to cancel COMLEX-USA Level 2-PE examinations on October 30 and 31. These decisions were made in advance to allow time for candidates travelling long distances to reschedule travel and their examination sessions. All 48 candidates scheduled for the cancelled dates were personally contacted by NBOME NCCST staff to assist in rescheduling their examinations and additional test sessions were added in November 2012 to accommodate these displaced candidates. Testing resumed on November 1.

Our Engaged Workforce

The Department of Clinical Skills Testing engages many members of the NBOME National Faculty in roles as physician examiners for the scoring of both SOAP Notes and Osteopathic Manipulative Treatment (OMT). In addition, committees including the Case Development Committee and Clinical Skills Testing Advisory Committee, provide information and guidance for the COMLEX-USA Level 2-PE. Finally, NCCST staff provides professional

service to our candidates throughout the year.

In 2012, the department experienced expansion of staff, including additional personnel in psychometrics and research, training and examination development, and examination administration. The addition of these talented individuals will provide us with the resources necessary to meet the demands for more examinations and continued research in clinical skills assessment.

Collaboration and International Growth and Development

The NBOME is truly becoming a global leader in assessment for osteopathic medicine and related health care professions, and to that end have pursued collaborative relationships with vendors as well as with potential clients for the development of and/or the delivery of clinical skills assessments.

Staff from the NCCST were visible on a national and international level in 2012 at various conferences including the International Meeting on Simulation in Healthcare, American Educational Research Association/National Council of Measurement and Education, the Association for Standardized Patient Educators, the Ottawa Convention on Clinical Competence, the American Association of Medical Colleges, the American Association of Colleges of Osteopathic Medicine, and the AOA OMED conference.

Researchers at the NBOME NCCST continue to add to the body of evidence to support the validity, reliability and fairness of the COMLEX-USA Level 2-PE with 2012 publications in *Family Medicine*, the *Journal of the American Osteopathic Medical Association*, *Teaching and Learning in Medicine*, and *Advances in Health Sciences Education*. A list of the research activities is found on page 39.

COGNITIVE TESTING & RESEARCH

The Department of Cognitive Testing provides test development and psychometric services to support osteopathic medical education, the osteopathic medical profession and related health care professions, and the state medical licensing boards. The Psychometrics and Research Division conducts studies to support the reliability, validity, and continuous quality improvement of evaluation instruments and services.

The department is responsible for producing 24 different examination products, including the cognitive examinations in the COMLEX-USA osteopathic licensure series, as well as achievement, self-assessment, post-licensure specialty certification and re-certification examinations. In 2012, the department administered approximately 46,000 examinations, comprised of:

- **COMLEX-USA:** Level 1, Level 2-Cognitive Evaluation (CE) and Level 3 for initial licensure
- **COMSAE:** A self-assessment series used in preparation for COMLEX-USA; its Phases 1, 2, and 3 correspond to COMLEX-USA Levels 1, 2-CE and 3
- **COMAT:** Subject examinations for use by the colleges of osteopathic medicine
- **COMVEX:** For osteopathic physicians who need to demonstrate current osteopathic medical knowledge for re-entry or related purposes
- **Client Examinations:** Test development, test administration, and psychometric services for seven specialty board, specialty college and related clients, totaling 10 administrations in 2012. A new client and examination were added for 2013.

Electronic Score Reporting

Electronic Score Reporting (ESR) went live for COMLEX-USA Level 1, Level 2-CE and Level 3 on October 2, 2012. The new COMLEX-USA ESR system automates the process for score report delivery. Both colleges of osteopathic medicine (COMs) deans and students can access score reports directly from their respective portals on the NBOME Client Registration System (CRS). The ESR system provides individual performance profiles, which enable candidates to identify their relative strengths and weaknesses across disciplines within each examination.

Electronic score reporting was also implemented for COMAT examinations on November 1, 2012, and now includes national normed standard scores. Deans are able to view individual student score reports as well as school cumulative score reports.

The Psychometrics and Scoring team and the Client Services team in the Department of Cognitive Testing jointly conducted a series of webinars to prepare schools for the transition from paper reports to the ESR, as well as how to interpret and use the COMAT standard scores.

Item Bank

Cognitive Testing Department staff and other involved departments within the NBOME researched best practices in item banking systems in 2012, as they move to select a new item bank repository system to meet both current and future needs of NBOME cognitive examinations. The new item bank system will be implemented for use in developing NBOME cognitive examinations by late 2013 or early 2014.

COMLEX-USA

The quality of the COMLEX-USA cognitive examinations is in a process of continuous improvement and the Cognitive Testing Department

is in the process of defining formal benchmarks according to standard best practices. The reliability and decision consistency measures of COMLEX-USA examinations remain at or above industry standards, and at or above those reported by peer organizations for similar examinations.

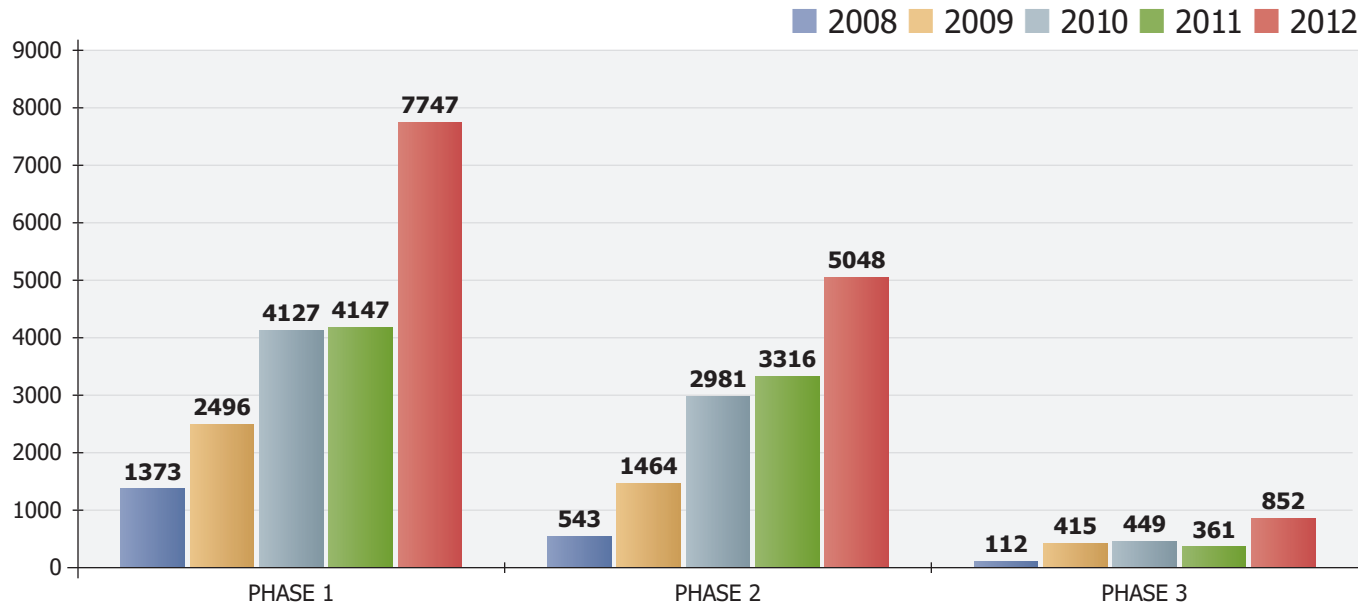
In 2012, the Department of Cognitive Testing continued developing innovations in testing with the goal to increase the "authenticity" of our evaluation instruments and to further assess elements of osteopathic medical competency domains that were not being well assessed. Advanced items with audio-visual components such as heart and lung sounds, video clips of patients and clinical findings and avatars were used in the COMLEX-USA Level 3 examination in 2012. Significant work was done in 2012 so that advanced items could be included in all examination tutorials and web-based practice examinations beginning in early 2013.

The Department of Cognitive Testing also worked diligently with test-delivery vendors to implement more advanced highlighting and strike-out functions within all three Levels of COMLEX-USA examinations.

The Clinical Decision-Making (CDM)/Key Features Task Force led by Dr. Georges Bordage, a highly renowned expert consultant in medical assessment, held its initial meeting in October 2012. The task force – comprised of NBOME leadership, experts in assessment and osteopathic medical practice and education – reviewed the distinctiveness and benefits of developing CDM/key features type examination items, and will be further exploring the feasibility of incorporating the CDM/key features type items into the COMLEX-USA examination series.

The Cognitive Testing Department also actively participated in other initiatives to enhance the COMLEX-USA examinations, including those of NBOME's Blue Ribbon Panel on Enhancing COMLEX-USA. One important initiative was review of the current blueprint to identify content and competency domain elements not being addressed, in order to assure that current assessment programs reflect distinctive and up-to-date osteopathic physician practice and best help to protect the public. A Task Force on Pain and Controlled Substance Prescribing is assisting with assuring best-practice standards for the challenges related to the prescribing controlled

INCREASE IN NUMBER OF CANDIDATES TAKING THE COMSAE – 2008 TO 2012



substances and treating patients with pain.

COMSAE

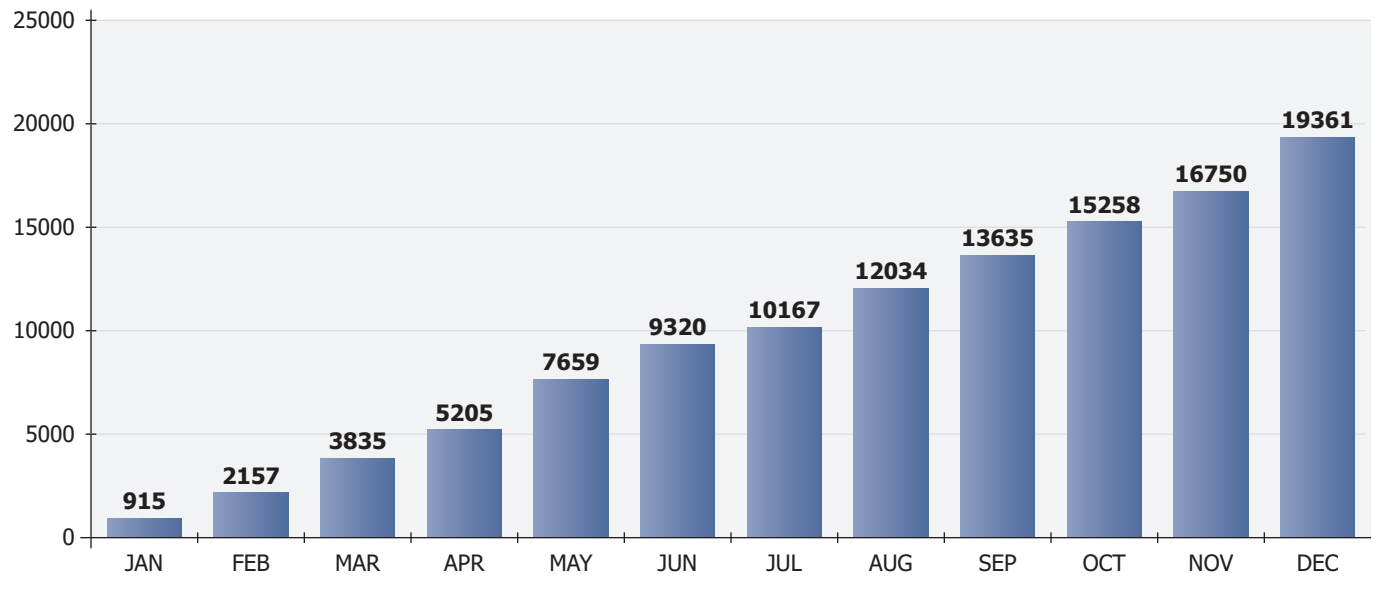
COMSAE was developed in 2008 to provide a self-assessment and practice evaluation for osteopathic medical students and resident physicians to test readiness to take COMLEX-USA cognitive examinations. COMSAE has three phases, each corresponding to its compatible COMLEX-USA Level cognitive examination. Feedback on COMSAE from candidates and schools has been excellent; candidate and COM use of COMSAE continues to increase. (See COMSAE usage chart 2008-2012). Our research shows a significant predictive validity of COMSAE for COMLEX-USA performance when the COMSAE examination is taken in a timed setting.

COMAT

COMAT, the NBOME's web-based subject examination program, was officially launched in July 2011. In the first year administration from July 2011 to June 2012, 19 colleges of osteopathic medicine (COMs) administered approximately 16,000 COMAT individual examinations. From July 2012 through calendar year-end, more than 10,000 COMAT examinations were administered at 22 COMs, a 44 percent increase as compared to the same time period in the 2011-2012 testing year. All but four COMs have had third-year students come on board to use COMAT examinations in 2012. The vast majority of COMs are using COMAT for summative purposes, such as in core clerkships/clinical rotations as "End-of-Service" cognitive examinations in one of the seven clinical subjects available in the COMAT program. In 2012, national-normed standard score reports for COMAT were introduced.

Currently, there are seven COMAT specialty examinations: Family Medicine, Internal Medicine, Pediatrics, Obstetrics and Gynecology, Psychiatry, Surgery, and Osteopathic Principles and Practice. COM representatives have expressed an interest in expanding the COMAT program to include other specialty domains, such as Emergency Medicine, Geriatrics Medicine, and a comprehensive Foundational Biomedical Sciences achievement test. The development of COMAT Emergency Medicine examination has been launched, with release currently planned for 2015.

COMAT USE IN 2012 (CUMULATIVE)



COMVEX

COMVEX use continues by the state medical and osteopathic medical licensing boards to test currency in general medical knowledge of formerly or currently licensed osteopathic physicians for the purposes of reentry to clinical practice or related uses. The Department of Cognitive Testing continues to explore areas of use for COMVEX, including potential use for physician continuous professional development and remedial education programs for the purpose of osteopathically distinctive and specialty-specific cognitive assessments.

Additional Assessment Services

To fulfill the NBOME's vision to be the global leader in assessment for osteopathic medicine and related health care professions, the Department of Cognitive Testing continues to expand its services to other organizations. In 2012, NBOME provided services to seven specialty Boards and Colleges (see chart below) for 5,940 administrations of client examinations.

The NBOME regularly seeks opportunities to partner with other specialty boards and colleges to provide similar services. In 2012, the American College of Osteopathic Pediatricians (ACOP) joined the NBOME's client list for services beginning in 2013.

The NBOME assisted the American College of Osteopathic Family Physicians (ACOFP) in successfully converting to web-based administration for its resident in-service examination in October 2012. The NBOME also worked with a number of other clients in preparation to convert to web-based examination delivery in 2013 and 2014.

Staffing

The year proved to be transformative in many ways for the Department of Cognitive Testing, with some significant leadership transitions. The Department's longstanding leader and Vice President for Cognitive Testing, Linjun Shen, PhD, left in May 2012 to pursue other professional goals after more than two decades with the NBOME. Senior Vice President Dr. Gerry Osborn also transitioned out of the NBOME in June. President and CEO, Dr. John R. Gimpel, aided by other members of the executive team, provided interim departmental leadership while a highly competitive search for new leadership for the Department was conducted.

In October, the NBOME welcomed Hao Song, PhD, as Senior Director for Psychometrics and Research. Dr. Song brings valued experience in medical assessment and psychometrics, most recently from the American Board of Internal Medicine. After a successful six-month national search to fill the vacant Senior Vice President position, the Department prepared to welcome Bruce Bates, DO, as its incoming new senior osteopathic physician leader, to begin in early 2013. In joining the NBOME staff, Dr. Bates brings distinguished experience in medical education, leadership and assessment, including a long-standing history of service to the NBOME over many years. He comes to the NBOME from the University of New England College of Osteopathic Medicine in Maine, where he most recently served as Associate Dean for Clinical Affairs and Chair of the Department of Geriatrics.

2012 NBOME CLIENTS FOR ASSESSMENT SERVICES

American Academy of Pediatric Dentistry (AAPD)	**In-service examination**
American College of Osteopathic Emergency Physicians (ACOEP)	**In-service examination**
American College of Osteopathic Family Physicians (ACOFP)	**In-service examination**
American College of Osteopathic Internists (ACOI)	**In-service examination**
American College of Osteopathic Surgeons (ACOS)	**In-service examination**
American Osteopathic Board of Emergency Medicine (AOBEM)	**Certification and Recertification examinations**
American Osteopathic Board of Pediatrics (AOBP)	**Certification and Recertification**

CONTINUOUS PROFESSIONAL DEVELOPMENT AND INNOVATIONS

THE DEPARTMENT FOR CONTINUOUS PROFESSIONAL DEVELOPMENT & INNOVATIONS (CPDI) HAS MADE SIGNIFICANT PROGRESS ON FOUR MAIN AREAS OF CONCENTRATION IN 2012:

Blue Ribbon Panel on Enhancing COMLEX-USA

The Blue Ribbon Panel on enhancing COMLEX-USA was charged with researching, considering and outlining a plan to implement a two-decision point, competency-based COMLEX-USA that is consistent with NBOME's mission to protect the public. The NBOME's Board of Directors accepted the panel's recommendation in 2012 for a three-axis blueprint: Competency Domain, Clinical Presentation and Lifecycle. With the assistance of the Blueprint Subcommittee of the COMLEX-USA Composite Committee (CCC), details regarding the subcategories for each axis are being defined. After the construct is finalized in 2013, further work will address content specifications, weighting, factor analysis and psychometric review.

The Blue Ribbon Panel continues to make recommendations regarding enhancement to COMLEX-USA, assuring that appropriate instruments are used to evaluate a candidate's ability to provide safe and competent care for patients as candidates advance toward initial licensure.

Other enhancements have been incorporated for the current COMLEX-USA series. Multimedia items have been successfully incorporated, and psychometric analysis is ongoing. Additional multimedia items were explored in 2012 and will be incorporated soon in the current COMLEX-USA. In addition, test items are being developed to assess a candidate's ability to interpret information, assessing the competency of practice-based learning and improvement.

Osteopathic Continuous Certification (OCC) and Maintenance of Licensure (MOL)

Recognizing that assessment of knowledge and clinical skills should not stop after initial licensure, the American Osteopathic Association (AOA) has implemented guidelines for Osteopathic Continuous Certification (OCC), and the Federation of State Medical Boards (FSMB) is in the process of implementing guidelines for Maintenance of Licensure (MOL). The NBOME has devoted significant attention and resources toward the development of tools to assist stakeholder groups and osteopathic physicians in satisfying these requirements and demonstrating competency across their careers.

Throughout 2012, the NBOME worked with a number of osteopathic specialty boards and many members of the AOA's staff and Bureaus to help develop assessment tools that would enable their members to meet the AOA Bureau of Osteopathic Specialist's (AOA-BOS) OCC requirements, which went into effect January 2013. AOA-BOS leadership has encouraged the NBOME in its outreach to assist specialty certification boards and individual osteopathic physicians in meeting OCC specifications.

The NBOME continues to work closely with the FSMB's Pentalateral Group on MOL, which includes representation from the FSMB, American Board of Medical Specialties (ABMS), National Board of Medical Examiners (NBME), AOA and the NBOME. In 2012, this group launched its pilot project initiative; 10 pilot projects, including one jointly sponsored by the AOA and NBOME, have been outlined and presented to the 11 interested state medical boards. In 2013, the NBOME hopes to collaborate with one of these state medical boards and launch an NBOME/AOA-sponsored MOL pilot project.

In late 2012, the NBOME's Task Force for Continued Fitness to Practice formally changed to the Continuous Professional Development Advisory Committee (CPDAC) to reflect NBOME's interest in supporting continuous professional development. CPDAC will continue to address key competency domains as they relate to residency assessments, patient safety, MOL, physician reentry, and the AOA's OCC.

The NBOME also developed relationships with two continuing medical education (CME) providers and arranged for osteopathic physicians to receive Category 1A AOA CME credit for participating in NBOME-related activities.

- Working with the American College of Osteopathic Family Physicians (ACOFP), a joint proposal was accepted for a web-based CME activity: a three-hour CME program addressing communication skills using a web-based interface (Skype) and Remote Standardized Patients (RSPs).

- Working with Kansas City University of Medicine and Biomedical Sciences (KCUMB), a second proposal was accepted for a seven-hour case development program CME activity.

Osteopathic Performance Assessment and Improvement Module (OPAIM™)

One of the five strategic initiatives of the NBOME's five-year strategic plan is the "Continuum of Competency Assessment." It calls for expanding competency assessment across the osteopathic medical education, training and practice continuum. Recognizing that osteopathic medical education is a lifelong process and requires teaching and assessment across the entire continuum of education – undergraduate, graduate and continuing medical education – a number of continuous professional development initiatives are being investigated and developed. Among the initiatives is the Osteopathic Performance Assessment and Improvement Module (OPAIM™) program, which is intended to support continuous professional development (CPD) for osteopathic physicians. These include osteopathic specialty boards, colleges, and individual osteopathic physicians, as they seek to meet the requirements of the AOA's OCC initiative, MOL, or other related CPD activities.

Each OPAIM™ is a comprehensive collection of learning components and formative assessments carefully designed to foster lifelong learning for

osteopathic physicians. Delivered via the web, each OPAIM™ combines pre-knowledge assessment, pre-practice assessment, educational material, self-reflection, post-knowledge assessment and post-practice assessment. Assessment and educational materials are osteopathically distinct and designed specifically for DOs.

Throughout 2012, the NBOME developed the first two OPAIM™ products for introduction in early 2013. They were also developed as a prototype by request of osteopathic specialty boards in order to foster further development of additional modules in partnership with specific specialty boards to meet particular CPD needs for their diplomates.

Web-Based Communication Assessment of Doctor-Patient Communication Skills

In 2012, the NBOME developed a formative assessment of doctor-patient communication skills using Remote Standardized Patients (RSPs) and a web-based communication interface, Skype.

A pilot study was conducted between October and December of 2012 with 59 osteopathic residents from a variety of disciplines across the country. More than 200 doctor-patient encounters were conducted using a number of learning technologies for the web-based exercises.

After the study, the majority of residents reported they were satisfied with the overall experience, learning exercise, communication format (Skype), and interactions with RSPs. The vast majority of residents (99 percent) agreed or strongly agreed that the overall format for receiving verbal feedback was valuable.

User acceptance for this web-based communication exercise using RSPs was high, suggesting that further investigation is warranted. While this type of formative educational exercise could not replace the assessment of doctor-patient communication skills in the high-stakes clinical skills examination format, such e-learning initiatives may provide educational benefit for students, residents and practicing physicians in the future. The NBOME will be presenting analysis regarding the study at a number of conferences in 2013, along with submission for publication.

Future Directions

The NBOME made a significant commitment to the area of continuous professional development by evolving its Department of Innovations into the Department of CPDI in late 2011 and early 2012. The department looks forward to its continued work with stakeholders to develop assessment instruments and services designed for osteopathic physicians, ensuring they have the knowledge and skills required for the delivery of high quality, safe care to their patients. These efforts are wholly consistent with the NBOME's mission to protect the public and its vision to be the testing organization for the entire osteopathic profession.

ADMINISTRATION DEPARTMENT

HUMAN RESOURCES DIVISION

The Human Resources (HR) Division exists to create an environment in which NBOME employees have opportunities for advancement and development, competitive benefits and supportive working relationships. During a busy year, HR helped move forward key NBOME strategic initiatives, including the important Strategic Plan 2012-2016 objective "Engage the Workforce." Among the highlights:

Crystal Wilson, MEd, was named Interim Assistant Vice President for Human Resources in June, and led a variety of efforts intended to increase departmental effectiveness, improve processes and information sharing, update benefits and enhance internal HR systems.

In an effort to promote internal collaboration, NBOME scheduled a variety of meetings, ranging from regular Executive Leadership Team get-togethers to weekly all-staff briefings. The NBOME also encouraged greater interaction between the NBOME Board of Directors and staff, with Board meetings held in June in Chicago and in December in Philadelphia.

HR facilitated the recruitment and hiring of 22 new NBOME employees during the year, including national searches for two key senior executive positions. Among the employees filling senior NBOME leadership positions were Joseph Cruitt, MBA, CPA, Vice President for Finance & Chief Financial Officer; Jeanne M. Sandella, DO, Vice President for Clinical Skills Testing; and Erik Langenau, DO, Vice President for Continuous Professional Development and Innovations.

HR has played a vital role by introducing tools and procedures that will formally and continuously develop the capabilities and effectiveness of the NBOME National Faculty. The National Faculty is comprised of more than 800 highly qualified osteopathic physicians and diverse professionals from across the country with expertise in the health professions and osteopathic medical practice, medical education, assessment and medical licensure and regulation. Together, the NBOME National Faculty and staff perform functions required for high quality test development, standard setting, continuous quality improvement, innovations in testing and research.

In 2012, the NBOME embarked on an exciting transformation of its National Faculty. The transformation, effective January 1, 2013, includes a re-designed, re-organized and expanded National Faculty, changes in leadership positions, and changes in positions for test item-writers, expanding credentialing as well as training initiatives, broadening faculty expertise, and therefore further enhancing the quality of NBOME examinations.

In October, the NBOME publicly launched the NBOME National Faculty transformation recruitment process, with the announcement and posting of 34 leadership positions to fill the COMLEX-USA Level and Examination Chairs and Chairs of Clinical and Foundational Biomedical Science Departments and Divisions. In addition, openings for contracted and volunteer item writers, as well as a Resident Recruitment Program were created. With a strong response to the call for faculty leadership positions, by year end, more than half of the 34 leader positions were filled, with highly qualified applicants. The remaining openings are expected to be filled in early 2013.

A large part of HR's work is devoted to cultivating excellence in the NBOME workforce by retaining enthusiastic, committed employees and encouraging their professional and individual growth. Staff-development highlights over the past year include two highly successful retreats in July: one for members of the National Center for Clinical Skills Testing and the other for the Cognitive Testing Department. HR also helped facilitate an important organizational opportunity for NBOME staff members to be more directly engaged in the

strategic planning process, providing opportunities for their direct input into the plan. Another key initiative was adapting the NBOME "Performance Appraisal and Enrichment" employee performance review forms to integrate NBOME core values.

NBOME's popular "Food for the Mind" luncheon staff development program continued, providing enrichment for staff on topics ranging from improved test item writing and editing skills to employment interviewing techniques to other assessment related topics. More than 800 hours of activity during the year were offered that directly contributed to staff development and enrichment, including various team-building exercises and staff coaching and training efforts.

In addition to benefits and professional development, other HR activities throughout the year promoted employee engagement, including such activities as the employee wellness program, charitable giving and community outreach activities, employee recognition and social outings.

CLIENT SERVICES DIVISION

The many process improvements made by the NBOME throughout the year required the close collaboration with and support of the NBOME Client Services Division to ensure smooth and effective deployment.

COMAT Support – COMAT administration continues to be a major activity supported by the Client Services Division. The second COMAT examination cycle began in July 2012, and by December 2012, 22 colleges of osteopathic medicine (COMs) had administered aproximately 10,000 examinations.

In response to the COMs' feedback, Client Services collaborated with the Information Technology and Scoring Divisions to make changes to enhance the COMAT examinations' utility and usability. Specifically, COMAT standard scores were introduced in early November. To help prepare for the changes that accompany standard scores, Client Services hosted a series of webinars during which users learned about COMAT standard scores and had the opportunity to discuss their use with other COMAT users. The new format for standard scores on the COMAT portion of the Client Registration System was also demonstrated. Regular updates to COMs that use COMAT are provided via a COMAT newsletter.

COMSAE Bulk Purchase – In response to the increasing purchases of COMSAE by COMs, Client Services and IT developed a method by which COMs could purchase COMSAE in bulk via the Client Registration System school page. Additional functionality now allows Deans and Dean designees to retrieve COMSAE results upon their students completing the assessment.

ADAA Webinars – With the goal of improving the COMs' ability to support their students in relation to the Americans with Disabilities Act as Amended (ADAA), Client Services arranged several webinars to help improve understanding of the NBOME test accommodations processes and policies. The webinars covered how the NBOME accepts, reviews and responds to applications for accommodations under the ADA as amended and more than 50 faculty and staff members from more than 20 COMs participated.

Electronic Score Reporting – Implementation of electronic score reports allows candidates and COMs to receive the score reports immediately after the results are posted. It is an efficient and dependable method in comparison to the paper reports, saving time and postage and alleviating anxiety. Client Services was a key partner in development of the reports and implementation of the program.

Transcript request process – Client Services worked with the Information Technology (IT) Division to consolidate and streamline the COMLEX-USA transcript request process. Internal procedural changes have eliminated extra steps and shortened processing time. Candidates are now able to follow the status of their request from their online account. Client Services team members have been cross-trained to ensure all are better able to assist clients.

COMMUNICATIONS DIVISION

The Communications Division partners closely with NBOME leaders to align communication strategies and messaging, and develop compelling internal and external content that favorably positions the NBOME strategy and brand. In 2012, Communications again achieved these goals by supporting the many NBOME internal and external activities through key message development, media and public relations activities, sponsorship execution, marketing communications, graphic design, publications and online communications.

One of the most impactful Communications projects of the year was the overhaul of the NBOME website. The redesign significantly improved the content and navigation to better meet our stakeholders' needs, and ensured consistency with the NBOME's well-established branding and visual identity. While the official launch took place in 2013, the majority of the work supporting the effort was completed in 2012.

In conjunction with the website launch, the NBOME introduced its Facebook page. Targeted primarily at students, it has quickly proven to be a valuable tool in engaging this critical audience through the relevant and useful information shared.

The NBOME's Communications Division has established a strong foundation of activities to reach key stakeholders. They include internal and external newsletters, the NBOME annual report, support for organizational initiatives to improve customer service (electronic score reporting, introduction of COMAT standard scoring) and support for the introduction of new products (OPAIM™) to name a few examples.

One of the Division's most important efforts in 2012 was support for development and communication of the NBOME's five-year strategic plan. Throughout the year, staff members were kept informed and engaged through regular updates. And once the plan was finalized and approved, external audiences were informed of the plan through a new brochure, "Directions for the Future – 2012-2016 NBOME Strategic Plan."

Finally, an essential means of reaching key stakeholder audiences is through annual meetings, conferences and sponsorships. In 2012, NBOME Communications executed our involvement in the following:

- 2012 AACOM annual meeting and sponsorship
- 2013 AACOM Diamond sponsorship
- 2012 FSMB meeting and sponsorship
- 2012 IAMRA meeting and sponsorship
- 2012 AOA Osteopathic Medical Conference and Exposition
- Sponsorship of the AOA's National Osteopathic Advocacy Center

The Communications Division continues to support the entire organization in its ability to address our many audiences in a clear, consistent and professional manner, and continues to ensure the consistent portrayal of the NBOME brand in all media.

INFORMATION TECHNOLOGY DIVISION

The Information Technology (IT) division was very active in 2012, creating positive change in four key areas: infrastructure, security, process redesign and departmental organization.

Infrastructure upgrades include a completely new and redesigned network for both the Chicago and Philadelphia offices. The NBOME now hosts Disaster Recovery for the computer-based testing systems in-house by leveraging both offices. IT instituted virtual technologies to lower hosting costs and improve agility. The new data center in Philadelphia is backed up by the building generator and new battery system, and new security measures were designed into the new network.

Process redesign has improved NBOME software development competencies. The Development team has adopted an "Agile" approach to software development and it is being used with positive results in new-product development. Agile was also used in developing and implementing electronic score reports for both COMLEX-USA and COMAT examinations, and for the reengineering of the Electronic Residency Application Services program.

IT staff in the Clinical Skills Department are highly engaged with the new clinical skills platform development effort, called Orion, an examination management system that handles every technical aspect of examination administration. It will be faster, offer more features, and because it is web-based it is more convenient. A release is planned for mid-2013.

IT has met the increased technology demands with staff augmentation and organizational changes that have increased both efficiency and responsiveness. A new Database Architect has been hired to support the current cognitive testing item bank through end-of-life and the planned transition to a new item bank. The Clinical Skills IT team is now a part of our single IT division. A new Infrastructure Manager and a new IT Project Manager are growing the division, and we have engaged with .NET developers as needed for targeted deployment on projects where such expertise is required. Oracle APEX developers were added to the IT team to support the new Candidate Registration System and the new NBOME Online Contacts Database.

These accomplishments were achieved through collaborative team building with business process owners, leadership, and NBOME constituents.

FINANCE

The NBOME's mission to protect the public and its dedication to the osteopathic profession requires a financially prudent and sustainable organization, now and in the future. Performance Excellence, one of the key elements of the NBOME's five-year strategic plan, calls for the NBOME to manage the organization using key financial performance indicators. These key financial indicators are monitored on a frequent basis, and great care is taken to understand financial implications of decisions.

This legacy of financial responsibility puts the NBOME in a sound position, allowing us to invest in the future to meet technological advances and develop cutting edge assessment tools for the benefit and advancement of the osteopathic profession. The NBOME financial position remains stable.

As the NBOME procures the resources necessary to create reliable, valid and fair assessment tools, we are at the same time attentive to the financial burdens of those who take our examinations, particularly osteopathic medical students. For the 2011-2012 examination cycle, we were again able to hold price increases for the COMLEX-USA series to less than three percent overall. This followed a period that saw academic tuition costs rise more than eight percent.

The NBOME's track record of approved balanced budgets and cost management has resulted in the ability to operate the organization without the burden of outside financing, and allowed us to set aside funds to meet future assessment needs of the profession.

The NBOME completed several investment initiatives in 2012, including expansion of the Chicago Corporate Offices and Conference Center, a state-of-the-art meeting space conveniently located near O'Hare Airport. The Conference Center and NBOME staff have already hosted many important meetings of organizations representing the osteopathic profession.

Also completed were renovations of the Philadelphia Executive Offices and the National Center for Clinical Skills Testing, including updating of the NBOME information technology infrastructure with a new data center.

The NBOME Board of Directors also approved investment in the development of new assessment products to support continuous professional development across the profession, furthering the NBOME's position as the assessment organization for the entire osteopathic profession.

The NBOME Board of Directors holds its fiduciary responsibilities to the organization as paramount. Key committees on Audit and Finance help fulfill these responsibilities. Through their oversight, three priority areas have been identified: financial reporting, investment management and budget management.

As part of its charter, the NBOME's Audit Committee works with external auditors to complete the financial audit. The NBOME received an unqualified opinion during its most recent audit. Other accomplishments include the approval of updated whistleblower and capitalization policies.

The Finance Committee works with NBOME management to complete responsibilities related to financial reporting, investment monitoring and budget management. Accomplishments during the year included recommending for Board of Directors' approval: the 2013 Budget, the National Faculty Transformation plan and a revision of the NBOME Investment Policy.

Other accomplishments in the Division of Finance include the reorganization of the Division, the implementation of a new payroll time and attendance system, and enhanced financial reporting.

SUPPORTING THE COMMUNITY AND THE OSTEOPATHIC PROFESSION

One of the important ways the NBOME demonstrates commitment to our values – particularly those of integrity, accountability and commitment to the osteopathic profession – is through the support we lend to the communities in which we operate and to members of the osteopathic community, and beyond.

- In March, the NBOME again served as sponsor of an all-participant luncheon at the annual meeting of the American Association of Colleges of Osteopathic Medicine (AACOM) in Washington, DC. The NBOME has served as a major sponsor of this annual educational conference since 2005, and in 2012, was proud to sign a long-term, sustaining Diamond Sponsorship agreement with AACOM.
- Also in March, the NBOME sponsored the "NBOME Executive Reception" area at the American Osteopathic Association's (AOA) National Osteopathic Advocacy Center (NOAC), the osteopathic medical profession's home in Washington, DC.
- The NBOME was a Gold Sponsor of the Federation of State Medical Boards' Annual Meeting and Centennial Celebration, held April 26-28, in Fort Worth, Texas.
- NBOME staff at all locations participated in the Lee National Denim Day in October and helped raise funds to support research to detect, treat and cure breast cancer.
- Following "Superstorm Sandy" in October, the NBOME helped relief efforts with a contribution to the Osteopathic Family Relief Fund.
- The NBOME served as a sponsor of the Advocates for the American Osteopathic Association (AAOA) "Still Fit for Life 5K Fun Run," which was held during the 2012 AOA Osteopathic Medical Conference and Exposition.
- Also in October, the NBOME was a Bronze Sponsor of the 10th International Conference on Medical Regulation, hosted by the International Association of Medical Regulatory Authorities (IAMRA) October 2-5, in Ottawa, Ontario, Canada.
- In December, numerous NBOME staff members made contributions to various charitable causes. Among them: staff in Philadelphia helped with generous donations to the Laurel House in support of victims of domestic violence; and staff in Chicago made generous donations to the Salvation Army's Angel Tree program, which provides gifts to families in need. A number of NBOME employees also supported the Red Cross and the U.S. Military in a letter-writing campaign for deployed soldiers, and were involved in a number of other hands-on community outreach and service projects.

RESEARCH

Research continues to be an important part of the development, administration and continuous quality improvement of the COMLEX-USA series of examinations and other assessments developed by the NBOME.

High quality research is conducted by a number of individuals and departments across the organization – Clinical Skills Testing, Cognitive Testing, and Continuous Professional Development & Innovations. Each department has a team that develops and conducts research projects specific to their respective areas. Bill Roberts, EdD, Director for Psychometrics & Research, heads the Clinical Skills Research team; Hao Song, PhD, Senior Director for Psychometrics and Research, heads the Cognitive Testing Research team; and Erik Langenau, DO, Vice President for Continuous Professional Development & Innovations (CPDI), heads the CPDI team.

Collaboration between these departments and teams is strong, resulting in quality research projects, presentations and publications that promote the NBOME, our testing expertise and initiatives, and the osteopathic medical profession as a whole. The opportunities for research, development and testing – including additional projects with external stakeholders – are exciting. The NBOME continues to collaborate with the AOA and the AACOM in producing the "Osteopathic Match Report." As the NBOME's research progresses, we look forward to enhancing our current cognitive and clinical skills testing formats, as well as developing new assessments for the future.

NBOME RESEARCH ACTIVITY SUMMARY (2012)

JOURNALS/PUBLICATIONS

PUBLISHED

- Aeder L, Altshuler L, Kachur E, Langenau E. Fostering an Atmosphere of Professionalism in a Residency Program: Learning How to Address the Unprofessional Behavior of Colleagues through OSCEs. MedEdPORTAL; 2012. Available at: www.mededportal.org/publication/9168.
- Langenau EE, Dowling DJ, Dyer C, Roberts WL. Frequency of specific osteopathic manipulative treatment modalities used by candidates while taking COMLEX-USA Level 2-PE. *J Am Osteopath Assoc.* 2012; 112(8): 509-513.
- Langenau EE, Sandella JM, Gimpel JR. Fairness to students top priority. *Fam Med.* 2012; 44(1): 53.
- Langenau EE, Gimpel JR. The Challenges for Physicians of Demonstrating Continuing Competence in the Changing World of Medical Regulation: Osteopathic Pediatrician Case Report. *J Med Reg.* 2012;97(4): 14-20.
- Langenau EE, Zhang X, Roberts WL, DeChamplain AF, Boulet JR. Clinical skills assessment of procedural and advanced communication skills: performance expectations of residency program directors. *Med Educ* Online. 2012;17.doi:10.3402/meo.v17i0.18812.Epub 2012 Jul 23
- Li, F, Cohen, A S & Shen, L, Investigating the Effect of Item Position in Computer-Based Tests. *Journal of Educational Measurement.* 2012; 49(4), 362-379.
- Roberts WL, Pugliano G, Langenau EE, Boulet JR. Modeling relationships between traditional preadmission measures and clinical skills performance on a medical licensure examination. *Advances in Health Sciences Education.* 2012; 17(3): 403-417. doi: 10.1007/s10459-011-9321-4.
- Sandella JM, Boulet JR, Langenau, EE. An evaluation of cost and appropriateness of care as recommended by candidates on a national clinical skills examination. *Teaching and Learning in Medicine: An International Journal.* 2012; 24(4), 303-308.

SUBMITTED

- Li F, Shen L, Cohen A. Random-effect Rasch model and a random-effect response time model for detecting item location effect. *Journal of Educational Measurement.* 2011. In review.

CONFERENCE ORAL AND POSTER, WORKSHOP AND SYMPOSIA PRESENTATIONS

PRESENTED

- Culbertson M, Li F. Analyzing knowledge structure: an application of graphical models to a medical licensure exam. Oral presentation at the 2012 Annual Meeting National Council on Measurement in Education, Vancouver, British Columbia, April 2012.
- De Champlain AF, Roberts WL. Evaluating the impact of judge characteristics in a standard setting exercise of a large-scale medical licensure performance assessment: an application of hierarchical generalized linear modeling. Presentation at 2012 National Council on Measurement in Education Annual Meeting. Vancouver, British Columbia, April 2012.
- Dickerman J, Turner M. Evaluation of a Patient Safety Risk Assessment form to identify medical safety risks in an ambulatory setting. Presentation at Institute for Healthcare Improvement 13th Annual International Summit on Improving Care in the Office. Washington, DC, March 2012.
- Langenau E, Kachur K, Ahn D. Incorporating elements of cultural and ethnic diversity into OSCEs and SP-based clinical encounters. Workshop presentation at 2012 Ottawa Conference on the Assessment of Competence in Medicine and the Healthcare Professions. Kuala Lumpur, Malaysia, March 2012.
- Li F, Shen L, Bodett S. Can enemy items be automatically identified? Oral presentation at the 2012 Annual Meeting of National Council on Measurement in Education, Vancouver, British Columbia, April 2012.

- Li F, Shen L. An Investigation of Time Management Strategies on Performance on a Computer-based Exam. Oral presentation at the 2012 Annual Meeting of American Educational Research Association, Vancouver, British Columbia, April 2012.
- Li F, Shen L. The retention of scientific knowledge by osteopathic medical students. Poster presentation at 2012 Annual Meeting of American Association of Colleges of Osteopathic Medicine, April 2012.
- Montrey D, Spinelli A. Finding (and Keeping) the Best SPs. Presentation at 2012 Annual Association of Standardized Patient Educators Conference, San Diego, CA, June 2012.
- Roberts WL. Application of a hierarchical generalized linear model to cutscore estimation of clinical skills performance on a national medical licensure examination. Paper presented at the Modern Modeling Methods Conference, University of Connecticut, Storrs, CT, May 2012.
- Sandella JM, Langenau EE, DeChamplain A. Assessing trainee leadership skills using Standardized Patient encounters in a cross-functioning team: a pilot study. Oral presentation at 2012 Ottawa Conference on the Assessment of Competence in Medicine and the Healthcare Professions, Kuala Lumpur, Malaysia, March 2012.
- Sandella JM, Langenau EE, Errichetti T. Opportunities and Challenges in Case Development for Osteopathic Clinical Skills Evaluations. Workshop presented at 2012 American Association of Colleges of Osteopathic Medicine Annual Meeting, Washington, DC, March 2012.
- Shen L, Li F, Hasty R. The relationship between the Comprehensive Osteopathic Medical Licensing Examination (COMLEX-USA) scores and the subsequent misconduct and professional development of Florida osteopathic physicians. Oral presentation at the 2012 annual meeting of American Educational Research Association, Vancouver, British Columbia, April 2012.
- Shen L, Li F. Multimedia Items in Medical Licensure Examinations: What Works and What Does Not. Oral presentation at the 2012 Annual Meeting of Association of Test Publishers, Palm Springs, CA, March 2012.
- Shen L, Li F. Performance variation of osteopathic student at different educational levels in two essential areas. Oral presentation at 2012 Ottawa Conference on the Assessment of Competence in Medicine and the Healthcare Professions, Kuala Lumpur, Malaysia, March 2012.
- Zhang X, Roberts WL. Many-facet Rasch analysis of standardized patient ratings of students' humanistic competence on a medical licensure examination. American Educational Research Association 2012 Annual Meeting, Vancouver, British Columbia, April 2012.
- Zhu X, Roberts WL. Cross-classified model of repeat examinee's ratings of humanistic competence on a medical licensure examination assessing clinical performance. American Educational Research Association 2012 Annual Meeting, Vancouver, British Columbia, April 2012.

ACCEPTED

- Goldstein L, Langenau E, Horber D. Web-Based Performance Assessment and Improvement Module. Accepted for oral presentation at MedBiquitous Annual Conference 2013, Baltimore, MD, April 2013.
- Langenau E, Kachur E, Horber D, Goldstein L. Instruction and Assessment of Doctor-Patient Communication Skills: A Novel Web-Based Approach. Accepted for oral presentation at MedBiquitous Annual Conference 2013, Baltimore, MD, April 2013.
- Li F, Robert B. Measuring Medical Students' Academic Growth by Growth Percentiles: Two Applications at Aggregated Level. Paper to be presented at the 2013 Annual Meeting of American Educational Research Association, San Francisco, CA, April 2013.
- Sandella JM, Roberts BR, Langenau EE. Assessment of doctor-patient communication, interpersonal skills and professionalism among trainees in postgraduate medical education. Accepted for poster presentation at the International Meeting on Simulation in Healthcare, Orlando, FL, January 2013.
- Song H, Hess B, Lipner R. Reporting Subcontent Scores on a Medical Certification Examination. Paper to be presented at the 2013 Annual Meeting of American Educational Research Association, San Francisco, CA, April 2013.

SUBMITTED

- Roberts, WL & Zairul Nor Deana Md, Desa. Multivariate repeated ratings of aspects in humanism on a clinical skill medical licensure examination. Paper submitted for the 2013 American Educational Research Meeting, San Francisco, CA.

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	9	1	60	1	65	14

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1	2	18	17	13	1	1	28	15	8

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ATSU-SOMA: A.T. Still University–School of Osteopathic Medicine in Arizona

AZCOM/MWU: Arizona College of Osteopathic Medicine of Midwestern University

CCOM/MWU: Chicago College of Osteopathic Medicine of Midwestern University

CUSOM: Campbell University School of Osteopathic Medicine

DMU-COM: Des Moines University College of Osteopathic Medicine

GA-PCOM: Georgia Campus–Philadelphia College of Osteopathic Medicine

KCUMB-COM: Kansas City University of Medicine and Biosciences College of Osteopathic Medicine

LECOM: Lake Erie College of Osteopathic Medicine

LECOM Bradenton: Lake Erie College of Osteopathic Medicine Bradenton Campus

LMU-DCOM: Lincoln Memorial University–DeBusk College of Osteopathic Medicine

MSUCOM: Michigan State University College of Osteopathic Medicine

MU-COM: Marian University College of Osteopathic Medicine

NSU-COM: Nova Southeastern University College of Osteopathic Medicine

NYCOM/NYIT: New York College of Osteopathic Medicine of New York Institute of Technology

OSU-COM: Oklahoma State University Center for Health Sciences College of Osteopathic Medicine

OU-HCOM: Ohio University Heritage College of Osteopathic Medicine

PCOM: Philadelphia College of Osteopathic Medicine

PNWU-COM: Pacific Northwest University of Health Sciences College of Osteopathic Medicine

RVUCOM: Rocky Vista University College of Osteopathic Medicine

TouroCOM-NY: Touro College of Osteopathic Medicine–New York

TUCOM-CA: Touro University College of Osteopathic Medicine–California

TUNCOM: Touro University Nevada College of Osteopathic Medicine

UMDNJ-SOM: University of Medicine and Dentistry of New Jersey–School of Osteopathic Medicine

UNECOM: University of New England College of Osteopathic Medicine

UNTHSC/TCOM: University of North Texas Health Science Center at Fort Worth Texas College of Osteopathic Medicine

UP-KYCOM: University of Pikeville–Kentucky College of Osteopathic Medicine

VCOM-CC: Edward Via College of Osteopathic Medicine–Carolinas Campus

VCOM-VC: Edward Via College of Osteopathic Medicine–Virginia Campus

WCU-COM: William Carey University College of Osteopathic Medicine

Western U/COMP: Western University of Health Sciences/College of Osteopathic Medicine of the Pacific

WVSOM: West Virginia School of Osteopathic Medicine

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