The National Board of Osteopathic Medical Examiners (NBOME) is exempt from income taxes under Section 501(c)(3) of the Internal Revenue Code. In addition, NBOME qualifies for the charitable contribution deduction under section 170(b)(1)(A) and has been classified as an organization other than a private foundation under IRC Section 509(a).
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Led by our Strategic Plan, and the generative, fiduciary, and strategic guidance of our Board of Directors, the NBOME experienced considerable growth, development and progress in 2010. Ever focused on the NBOME’s mission “to protect the public by providing the means to assess competencies for osteopathic medicine and related health professions,” the NBOME Board, staff and National Faculty have collectively realized numerous successes in the past year.

The achievements of 2010 were many. The NBOME’s Blue Ribbon Panel made significant progress in the research and planning for a transition to a competency-based, two-decision-point model for the COMLEX-USA series. The NBOME’s visual identity underwent an overhaul, and we implemented an updated, consistent corporate image – along with consistent messaging – both internally and externally. We made considerable investment in a systematic, sustained process improvement framework for the current COMLEX-USA examination series and other NBOME services, including a newly invigorated “customer service” orientation throughout the organization. We developed additional competency assessment tools and capabilities, including the new COMAT subject examinations designed for use by the colleges of osteopathic medicine. There was tremendous growth in use of the COMSAE self-assessment tools by medical students and residents. Our relationships with numerous Specialty Colleges and Specialty Boards were deepened and expanded. The NBOME provides these groups with test development, test administration, and/or psychometric services for board certification, recertification, and residency program in-training assessment, and this continues to be an area of strong growth. In 2010, the NBOME made a momentous change to the organization with the addition of a new Department of Innovations in Testing that focuses on enhancing existing assessment tools, developing new assessment tools, and emphasizes patient safety and novel testing formats and item types, both for physicians in training and post-licensure applications. This addition to the NBOME’s already extensive expertise has solidly positioned us with the talent, resources
and experience needed to fulfill our vision of becoming the testing organization for the entire osteopathic profession. In fact, in 2010 the NBOME had already begun to work with Specialty Boards in the area of Osteopathic Continuous Certification (OCC), and State Medical and Osteopathic Boards in the arena of Maintenance of Licensure (MOL).

We take pride that teamwork has been essential to the growth, development and progress made throughout the year. Teamwork is evident in the relationship between the NBOME Board and our staff. It is a driver behind the trust and collaboration across the NBOME, at our Philadelphia-based Executive Offices and National Center for Clinical Skills Testing, and our Chicago-based Corporate Offices. We would be remiss if we did not publicly offer the highest of praise for the NBOME staff, which is second to none. They embrace performance excellence and a culture of real-time problem solving that is truly fundamental to all our achievements.

The spirit of teamwork is strong among the NBOME’s National Faculty, which is comprised of some 600 osteopathic physicians and other medical educators and professionals from around the country. These dedicated volunteers – without whom our achievements would be impossible – come to the NBOME from colleges of osteopathic medicine, residency programs, the regulation and licensure community, and private clinical practices nationwide. Thank you for your continued commitment to the NBOME and its mission.

Lastly, the invaluable teamwork that supported much of the NBOME’s growth and development in 2010 is seen in the many relationships with stakeholder groups within the house of medicine. Not only does this include those for whom we provide assessment services, such as Colleges of Osteopathic Medicine, Specialty Boards and Specialty Colleges, but also the many alliances and coalitions we enjoy on the national and international front – members of the osteopathic family, the licensure community and medical educators at all levels. We have worked hard to align our initiatives with those of the many other organizations involved with physician accountability, licensure, accreditation, and regulation.

We would like to acknowledge:

› The American Association of Colleges of Osteopathic Medicine (AACOM)
› The American Association of Directors and Medical Educators (AODME)
› The American Association of Osteopathic Medical Examiners (AAOEM)
› The American Osteopathic Association (AOA)
› The Commission on Osteopathic College Accreditation (COCA)
› The Council of Medical Specialty Societies (CMSS)
› The Federation of State Medical Boards (FSMB)
› The International Association of Osteopathic Medical Regulatory Authorities (IAMRA)
› The Organization of Program Director Associations (OPDA)
› State Medical and Osteopathic Boards

The long list also includes others with whom we collaborate frequently to share best practices. We would further like to acknowledge:

› The Accreditation Council on Graduate Medical Education (ACGME)
› The American Board of Medical Specialists (ABMS)
› The Association of American Medical Colleges (AAMC)
› The Medical Council of Canada (MCC)
› The National Board of Medical Examiners (NBME)
› The Educational Commission for Foreign Medical Graduates (ECFMG)

The NBOME team has a clear and unequivocal commitment to our mission. This has resulted in great progress on new and existing assessment products, and creation of a fertile environment for continued growth and developments on behalf of those we serve. We believe the quality of health care, the services patients receive each day, and their interactions with physicians and other members of the health care team, will only continue to benefit from the advances being made, helping to solidify public trust in the medical profession as a whole. And as we reflect on 2010, it is indeed exciting to think ahead to future growth, and the fruits of our collective labor. Stay tuned!

John E. Thornburg, DO, PhD | Chair, NBOME
John R. Gimpel, DO, Med | President & Chief Executive Officer

**MISSION**
The National Board of Osteopathic Medical Examiners (NBOME) protects the public by providing the means to assess competencies for osteopathic medicine and related health care professions.
NBOME 2010 BOARD MEMBERS

FROM LEFT: NBOME Board Chair, John Thornburg DO, PhD, with NBOME Board members installed at the December 2010 meeting – Michael Finley, DO; Susan Belanger, PhD, RN; Rich La Baere, DO; and Karen Snider, DO.

Outgoing Board member, Craig Lenz, DO (center) is honored at the 2010 Annual Board Dinner by President & CEO, Dr. John Gimpel (left) and Board Chair, Dr. John Thornburg.

John E. Thornburg, DO, PhD
Okemos, Michigan
Executive Committee Member, Board Chair

Janice Knebl, DO, MBA
Fort Worth, Texas
Executive Committee Member, Vice Chair

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

William F. Ranieri, DO
Philadelphia, Pennsylvania
Executive Committee Member, Immediate Past Chair

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

Deborah Pierce, DO
Fort Washington, Pennsylvania
Executive Committee Member

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

William G. Anderson, DO
Detroit, Michigan

James M. Andriole, DO
Tallahassee, Florida

Susan Belanger, PhD, RN
Silver Spring, Maryland

Ronald R. Burns, DO
Winter Park, Florida

Millicent King Channell, DO, MA
Philadelphia, Pennsylvania

Carman A. Ciervo, DO
Stratford, New Jersey

Gary Clark
Jefferson City, Missouri

Michael Finley, DO
Pomona, California

Brian F. Fulton, DO
Cherokee, Iowa

Rich La Baere, DO
Grand Blanc, Michigan

Craig J. Lenz, DO
Harrogate, Tennessee

Michael K. Murphy, DO
Hattiesburg, Mississippi

Geraldine T. O’Shea, DO
Jackson, California

Dana C. Shaffer, DO
Des Moines, Iowa

Stephen C. Shannon, DO, MPH
Chevy Chase, Maryland

Karen Snider, DO
Kirksville, Missouri
JANUARY

- NBOME President & CEO, Dr. John Gimpel and NBOME Immediate Past-Chair, Dr. William Ranieri, represented the NBOME at the January 11th installation of the United States’ 18th Surgeon General, Regina Benjamin, MD, MBA, in Washington, D.C.
- Dr. Joel Dickerman, a Colorado Springs-based family physician and medical educator, was named NBOME Coordinator for Competency Assessment Projects and chair of the NBOME’s new Task Force on Competency Assessment Projects with a focus on post-licensure initiatives.
- NBOME Board Chair, Dr. John Thornburg and Dr. Gimpel, made an “NBOME Update” presentation at the 20th Annual Osteopathic Medical Education Leadership Conference in Newport Beach, California.
- Dr. Gimpel and former NBOME President, Dr. Fredrick Meoli, attended a teleconference meeting of the International Association of Medical Regulatory Authorities (IAMRA) Workgroup on International Licensure and Regulation.
- The NBOME electronically administered a residents’ in-service examination for the American College of Osteopathic Surgeons (ACOS), marking the first time the ACOS has delivered a web-based examination. Previously, ACOS used paper and pencil examinations developed and delivered by the NBOME.
- Dr. Thornburg and Dr. Gimpel made a presentation to the American Association of Osteopathic Examiners (AAOE) at their annual Educational Summit in San Antonio, Texas.

FEBRUARY

- The Comprehensive Osteopathic Medical Achievement Test (COMAT) Advisory Committee held a meeting at the NBOME’s Corporate Offices in Chicago on February 4th.
- NBOME Vice Chair, Dr. Janice Knebl, was appointed Chair of the Blue Ribbon Panel on Enhancing COMLEX-USA.
- Dr. Knebl, Board Chair Dr. John Thornburg, and President & CEO Dr. John Gimpel represented the NBOME at the American Osteopathic Association’s (AOA) mid-academic-year meeting in Chicago, where they provided updates on NBOME activities.
- The AOA approved NBOME bylaws changes that allows for an NBOME Board member to be nominated by the Association of Osteopathic Directors and Medical Educators (AODME).
- New standards for a passing score on the COMLEX-USA Level 3 examination were implemented.
- The COMLEX-USA Level 1 Standard Setting Committee met at NBOME Corporate Offices in Chicago to deliberate on new pass/fail standards for the examination.
- Despite record-setting snow that hit the Philadelphia area, NBOME staff at its National Center for Clinical Skills Testing was able to administer two COMLEX Level 2-Performance Evaluation examinations on two consecutive days when most of the area was snowed in and shut down.
- NBOME made a contribution to DOCARE International for Haitian earthquake relief efforts.
MARCH

› Gary Clark, NBOME Board member, received the Distinguished Service Award from the Federation of State Medical Boards (FSMB).
› Dr. Jim Andriole, NBOME Board member, received a Distinguished Service award from the Florida Osteopathic Medical Association (FOMA).
› NBOME’s Vice President for Clinical Skills Testing, Dr. Erik Langenau, addressed the National Commission on Certification of Physician Assistants (NCCPA).
› NBOME 2009 Item Writers and Case Author of the Year were named.
› The Standard Setting Committees for the COMLEX-USA Level 2-Performance Evaluation examination met in late February and in March at the NBOME’s National Center for Clinical Skills Testing in Philadelphia to deliberate on new pass/fail standards for the examination.
› A new section of the NBOME website, dedicated to providing information on Standard Setting for COMLEX-USA examinations, was introduced in early March.
› The NBOME began the launch of its visual identity overhaul with the introduction of a new logo which incorporated an updated NBOME seal, introduction of an employee newsletter, In Touch, and the redesign of the NBOME Board newsletter for consistency with the new graphics standards.

APRIL

› NBOME exhibited at two important meetings – the American Association of Colleges of Osteopathic Medicine (AACOM) Annual Meeting in Bethesda, Maryland, and the Federation of State Medical Boards’ (FSMB) Annual Meeting in Chicago, Illinois. NBOME representatives made numerous presentations, providing informative updates to participants at both meetings.
› The NBOME continued its visual identity overhaul with the introduction of new conference displays – unveiled for the first time at the above-mentioned meetings – that used striking photography to highlight the NBOME mission. Other printed and presentation materials were redesigned for consistency with the new graphics standards.
› Vice Chair, Dr. Janice Knebl, represented the NBOME at the annual meeting of the Association of Osteopathic Directors and Medical Educators (AODME).
› The NBOME and our COMLEX-USA series of examinations were mentioned in the New England Journal of Medicine. In an article advocating for maintenance of licensure initiatives, John B. Herman, MD, Clinical Professor of Psychiatry at Harvard Medical School, describes COMLEX-USA (and the NBME’s USMLE) as “a rigorous, comprehensive, well-designed and consistently updated licensing exam.”
› On April 16th, the NCCST conducted a very successful Spring Visitation day giving a comprehensive overview of the COMLEX Level 2-Performance Evaluation experience.
May

- NBOME Board member, Dr. Stephen Shannon, received the Pioneer of Osteopathic Medicine Medal at University of New England College of Osteopathic Medicine’s graduation ceremonies.
- NBOME President, Dr. John Gimpel, attended the National Alliance for Physician Competency’s (NAPC) Structure & Sustainability Design Workshop.
- New standards for a passing score on the COMLEX-USA Level 1 examination were implemented.
- The NBOME’s Blue Ribbon Panel on Enhancing COMLEX-USA held two meetings in May.

June

- The annual mid-year NBOME Board meeting was held in Park City, Utah.
- Joseph Smoley, PhD, transitioned to his new role as Senior Director for Test Development in the NBOME Department of Cognitive Testing.
- The NBOME met with representatives of the Federation of State Medical Boards (FSMB), the American Osteopathic Association (AOA) and the American Association of Colleges of Osteopathic Medicine (AACOM) in Washington, D.C. to discuss data sharing that would advance the mission of each organization.

July

- NBOME Board Chair, Dr. John Thornburg, and President & CEO, Dr. John Gimpel, delivered an NBOME update to the American Osteopathic Association’s (AOA) Board of Trustees at its Annual Business Meeting in Chicago, and attended the AOA’s House of Delegates.
- More than 17,000 candidates were tested on all COMLEX Levels during the 2009-2010 examination cycle.
- New standards for a passing score on the COMLEX-USA Level 2-Performance Evaluation examination were implemented.
- The NBOME Bulletin of Information was updated to reflect a number of policy changes, including the increase in the number of times – from three to four – a candidate could take a computer-delivered COMLEX-USA examination in a 12-month period.
- The first pilot of the Comprehensive Osteopathic Medical Achievement Test (COMAT) series of subject examinations was conducted. Several colleges of osteopathic medicine tried out a prototype of the COMAT-Family Medicine examination.

August

- NBOME President & CEO, Dr. John Gimpel, participated in the FSMB’s first meeting of its CEO Advisory Committee on Maintenance of Licensure. A dozen organizations – including the American Osteopathic Association (AOA), the American Association of Colleges of Osteopathic Medicine (AACOM), the National Board of Medical Examiners (NBME) and the Accreditation Council for Graduate Medical Education (ACGME) – were in attendance.
- The Federation of State Medical Boards (FSMB) made its first-ever official visit to the NBOME Offices in Philadelphia. Humayun J. Chaudhry, DO, MS, President & CEO of the Federation of State Medical Boards (FSMB), and members of the FSMB senior administrative team met with Dr. Gimpel and NBOME’s senior administrators.
- Larry Turner began his tenure with the NBOME as Vice President for Administration & Chief Operating Officer, and André F. De Champlain, PhD, joined the organization as its first-ever Director for Innovations in Testing.

September

- The NBOME family was saddened by the passing of Don Black, CPA, a member of NBOME’s Finance Committee since 2009. He had provided significant expertise to the Committee.
- The NBOME Executive Committee’s quarterly meeting, held September 24-25 in Philadelphia, featured the first-ever joint meeting with the Executive Committee of the Federation of State Medical Boards (FSMB).
The NBOME sponsored the International Association of Medical Regulatory Authorities’ (IAMRA) 9th International Conference on Medical Regulation, held in Philadelphia. The NBOME used the opportunity to promote the COMLEX-USA licensure examination series, and introduced the first in its series of product logos.

The IAMRA Assessment Resource, to which the NBOME provided significant input, went live on the IAMRA website. The tool provides information on assessment requirements and medical regulatory authorities from around the world.

The COMLEX Composite Committee – charged with general oversight of the COMLEX-USA examination series – held its inaugural meeting since restructuring and elimination of the Product Committee.

The NBOME Senior Staff held its annual two-day retreat at the NBOME Chicago Corporate offices.

Expansion of the NBOME Executive Offices, necessary to accommodate a growing staff and meeting needs across the organization, was completed on schedule.

The Liaison Committee held its annual meeting at NBOME’s Executive Offices, bringing together leaders from student groups (Student Osteopathic Medical Association, Council of Osteopathic Student Government Presidents), residents (American Osteopathic Association Council of Interns and Residents), the colleges of osteopathic medicine (American Association of Colleges of Osteopathic Medicine), graduate medical education (Association of Osteopathic Directors and Medical Educators and Organization of Program Directors Associations/Council of Medical Specialty Societies), the AOA, the American Association of Osteopathic Examiners and the Federation of State Medical Boards. A representative from the OPDA/CMSS was added this year, consistent with NBOME’s initiative to connect with Residency Program Directors from all residency programs – those accredited by the AOA and also those accredited by the Accreditation Council for Graduate Medical Education.

OCTOBER

› Board Chair, Dr. John Thornburg, appointed Susan Belanger, PhD, RN, Medical Ethics professor at Georgetown University School of Medicine, as an NBOME public Board member, filling the vacancy by the passing of Frederic Wilson.

› The NBOME made a strong showing at the American Osteopathic Association’s (AOA) annual Osteopathic Medical Conference & Exposition (OMED 2010) held in San Francisco, California. In addition to strengthening relationships with key stakeholders, NBOME representatives used OMED as a launching pad for its COMAT series of subject examinations and introduced a new COMAT marketing brochure.

› At OMED 2010, NBOME Board member, Dr. Gary Slick, was honored with the AOA’s Distinguished Service Award, the AOA’s highest honor.

› NBOME Board Chair, Dr. John Thornburg, Vice-Chair, Dr. Janice Knebl; Immediate Past Chair, Dr. William Ranieri; and President & CEO, Dr. John Gimpel attended the Annual General Meeting of the Osteopathic International Alliance (OIA) in San Francisco.

› The NBOME was represented by Dr. Gimpel and André De Champlain, PhD, Director for Innovations in Testing, at the 98th annual Medical Council of Canada meeting in Ottawa. The NBOME was notified by officials at the Federation of Medical Regulatory Authorities of Canada (FMRAC) that the American DO degree is now considered equivalent to either the American MD degree or the Canadian MD degree for the purposes of licensure and registration.

› The NBOME’s National Center for Clinical Skills Testing in Philadelphia held its bi-annual visitation day. Attendees from five different colleges of osteopathic medicine from various parts of the country learned about the COMLEX Level 2-Performance Evaluation and the NBOME.
**NOVEMBER**

- The Department of Cognitive Testing held a department retreat focused on restructuring to incorporate a new Senior Vice President for Cognitive Testing (DO requirement), a Senior Director (PhD requirement) for Cognitive Testing, and further processes of continuous quality improvement for COMLEX-USA and other NBOME cognitive examinations.
- The NBOME family was saddened by the passing of Dr. Robert E. Mancini, former Board member. Dr. Mancini was president of the NBOME Board from 1987-89 and a faculty member of New York College of Osteopathic Medicine, University of Medicine and Dentistry of New Jersey-School of Osteopathic Medicine, and the Philadelphia College of Osteopathic Medicine.
- NBOME Vice President for Cognitive Testing, Linjun Shen, PhD, MPH, delivered a presentation to the Association of American Medical Colleges (AAMC) Annual Meeting in Washington, D.C. The presentation was based on a paper Dr. Shen and colleagues had published in the AAMC's journal, Academic Medicine, regarding novel testing items in COMLEX-USA.
- NBOME President & CEO, Dr. John Gimpel, represented NBOME at the AACOM Board of Deans annual retreat in Des Moines, Iowa.
- Larry Turner, Vice President for Administration & COO, attended the Testing Agencies Disability Forum (TADF) held in Reston, Virginia. He was joined by NBOME counsel, Syd Steele, Esq.

**DECEMBER**

- NBOME’s Executive Committee and Board held their annual meeting in Chicago, Illinois. Along with newly appointed public Board Member Dr. Susan Belanger, three new Board members were elected and installed; Dr. Michael Finley of Pomona, California; Dr. Rich LaBaere of Grand Blanc, Michigan; and Dr. Karen Snider of Kirkville, Missouri. Two outgoing board members, Dr. Craig Lenz and Dr. Brian Fulton, were honored for their service to the NBOME.
- During the annual Board Dinner in Chicago, the NBOME’s Santucci Award was given to Dr. Frederick Meoli, the NBOME’s former Chair of the Board and the first full-time Board President and CEO.
- The NBOME’s Departments of Innovations in Testing and Clinical Skills Testing collaborated to conduct a research project to investigate the assessment of higher-order communication skills and other competencies, including the use of evidence-based point of care resources. The study was conducted at the NBOME’s National Center for Clinical Skills Testing, involving numerous regional residency programs.
- Both the NBOME’s Philadelphia and Chicago offices participated in service to their respective communities for the holidays. The Chicago office participated in the ChildServ’s Annual Toy Drive and the Philadelphia office collected donations for Laurel House, a comprehensive domestic violence agency serving individuals, families and communities.
LIAISON COMMITTEE OFFERS OUTSTANDING COLLABORATION OPPORTUNITY

The NBOME Liaison Committee is a unique and important group that brings together key stakeholders in medical education (students, undergraduate and graduate medical education), assessment and licensure, and leadership of the osteopathic profession.

Through this Committee, the NBOME seeks to interact with and better understand the needs and perceptions of participating organizations. Membership of the Liaison Committee includes representatives of:

- Accreditation Council for Graduate Medical Education
- American Association of Colleges of Osteopathic Medicine
- American Association of Osteopathic Examiners
- American Osteopathic Association (AOA)
- AOA Council of Interns and Residents
- Association of Osteopathic Directors and Medical Educators
- Council of Osteopathic Student Government Presidents
- Federation of State Medical Boards
- Organization of Program Directors Associations/Council of Medical Specialty Societies
- Student Osteopathic Medical Association

The NBOME Liaison Committee met in September at its Philadelphia offices. During the meeting, a representative of each organization provided an update on its activities, and had the opportunity to address questions and suggestions to NBOME leadership. The meeting proved to be a very valuable information-sharing session, and also allowed a direct dialogue regarding issues, ideas, requests and future collaboration.
What Committee members have to say:

“The NBOME Liaison Committee meeting is an excellent opportunity for organizations linked to the NBOME to share activities they are engaged in and to learn about the COMLEX-USA examination and updates to it. The meetings are collegial, collaborative, informational and worthwhile for all those who attend.”

Humayun J. Chaudhry, DO, MS, President & CEO, FSMB

“It’s critical to the continued growth and success of the osteopathic profession that representatives of all perspectives within the profession come together and address the important issues of undergraduate and graduate medical education, and licensure. The NBOME Liaison Committee is a perfect venue for such differing perspectives and ideas to be discussed. I feel honored to have been able to represent the student perspective in this discussion at the Committee’s fall meeting.”

Crystal R. Lenz, OMS-IV, National President, SOMA

“The Organization of Program Directors Association of the Council of Medical Specialty Societies (OPDA/CMSS) was honored by the invitation to attend the NBOME’s Liaison Committee meeting in September, and looks forward to welcoming NBOME President, Dr. John Gimpel, to be a guest presenter at our spring 2011 meeting. Every opportunity for educators and leaders to congregate and share ideas ensures the brightest future for medicine.”

Tara Uhler, MD, OPDA/CMSS

“The NBOME Liaison Committee offers a unique opportunity to gather leaders of key organizations, within and outside of the osteopathic medical profession, not only to hear about NBOME’s initiatives and outcomes, but to engage in meaningful dialogue with NBOME’s leadership and professional staff about current developments in health professions education and licensing from a wide range of perspectives. It is a very useful meeting, and unlike any that I encounter elsewhere in the course of my activities.”

Stephen Shannon, DO, MPH
AACOM President

“The NBOME Liaison Committee meeting is one of the best meetings I attend all year. Together, Committee members address common issues of concern facing the osteopathic medical profession from many perspectives – all good. I leave these meetings optimistic about the future and ready to meet the challenges ahead.”

John Crosby, JD, AOA Executive Director
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 hundreds of external partners in our National Faculty, including committee members, item writers, 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 2010.

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 and Level 3. The information presented represents complete testing cycles, which run mid-year to mid-year. The 2010-2011 results will be reported in the 2011 NBOME annual report.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>N 1st Timer/Total</th>
<th>PASSING RATE 1st Timer</th>
<th>PASSING RATE Total</th>
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<tbody>
<tr>
<td><strong>LEVEL 1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006-2007</td>
<td>3434/4157</td>
<td>88.5%</td>
<td>84.0%</td>
</tr>
<tr>
<td>2007-2008</td>
<td>3655/4235</td>
<td>90.0%</td>
<td>86.2%</td>
</tr>
<tr>
<td>2008-2009</td>
<td>3773/4402</td>
<td>89.7%</td>
<td>85.0%</td>
</tr>
<tr>
<td>2009-2010</td>
<td>4221/4891</td>
<td>89.8%</td>
<td>86.3%</td>
</tr>
<tr>
<td><strong>LEVEL 2</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005-2006</td>
<td>2785/3322</td>
<td>87.0%</td>
<td>82.9%</td>
</tr>
<tr>
<td>2006-2007</td>
<td>3114/3701</td>
<td>88.1%</td>
<td>84.4%</td>
</tr>
<tr>
<td>2007-2008</td>
<td>3587/4194</td>
<td>90.6%</td>
<td>86.9%</td>
</tr>
<tr>
<td>2008-2009</td>
<td>3369/3805</td>
<td>92.0%</td>
<td>88.9%</td>
</tr>
<tr>
<td>2009-2010</td>
<td>3807/4783</td>
<td>82.6%</td>
<td>77.5%</td>
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<tr>
<td><strong>LEVEL 3</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>2005-2006</td>
<td>2434/2817</td>
<td>88.7%</td>
<td>85.1%</td>
</tr>
<tr>
<td>2006-2007</td>
<td>3173/3770</td>
<td>87.7%</td>
<td>84.2%</td>
</tr>
<tr>
<td>Dec. 2007-Jan. 2009*</td>
<td>3798/4340</td>
<td>91.1%</td>
<td>88.4%</td>
</tr>
<tr>
<td>2009-2010</td>
<td>3503/3934</td>
<td>91.9%</td>
<td>89.3%</td>
</tr>
</tbody>
</table>

*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 that took the COMLEX-USA Level 2-Performance Evaluation for each of the five testing cycles from 2005-2010 is shown in the chart below. This cohort includes both first-time takers and repeat takers.

The number of candidates tested in the most recent cycle is down slightly from the previous year. The 2008-2009 numbers included a 13th month*, and when deducted for a year-to-year comparison, the 2009-2010 numbers show a decrease of approximately 200. Registration so far in the 2010-2011 cycle suggests a likely increase of more than 500 examinations.

* A 13-MONTH PERIOD IS LISTED AS A RESULT OF A CHANGE IN THE TESTING CYCLE
The most recent testing cycle began July 2009 and finished June 2010. As shown in the graph below, the most active months of testing continue to trend toward the early part of the testing cycle with 70% of all examinations administered by January 2010. Trends of first-time takers shown in the graph suggest that the majority of candidates test early so they will have the opportunity to reschedule prior to graduation, in the event they do not pass.

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

YEARLY TRENDS IN THE NUMBER OF FIRST-TIME TAKERS BY TESTING CYCLE AND MONTH ARE SHOWN IN THE GRAPH ABOVE
The COMLEX Level 2-Performance Evaluation consists of two domains: humanistic (physician-patient communication, interpersonal skills, and professionalism) and biomedical (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). The table below shows the pass/fail rate for first-time takers by testing cycle, with additional data on each of the domains.

<table>
<thead>
<tr>
<th>Pass/Fail Rate for First-Time Takers by Testing Cycle</th>
<th>N</th>
<th>%A</th>
<th>%B</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2005-2006</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fail</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanistic Domain</td>
<td>135</td>
<td>11.1</td>
<td>4.7</td>
</tr>
<tr>
<td>Biomedical Domain</td>
<td>113</td>
<td>83.7</td>
<td>0.5</td>
</tr>
<tr>
<td>Both Domains</td>
<td>7</td>
<td>5.2</td>
<td>0.2</td>
</tr>
<tr>
<td>Pass</td>
<td>2721</td>
<td>95.3</td>
<td></td>
</tr>
<tr>
<td>Grand Total</td>
<td>2856</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2006-2007</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fail</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanistic Domain</td>
<td>203</td>
<td>27.1</td>
<td>6.6</td>
</tr>
<tr>
<td>Biomedical Domain</td>
<td>126</td>
<td>62.1</td>
<td>1.8</td>
</tr>
<tr>
<td>Both Domains</td>
<td>22</td>
<td>10.8</td>
<td>0.7</td>
</tr>
<tr>
<td>Pass</td>
<td>2896</td>
<td>93.4</td>
<td></td>
</tr>
<tr>
<td>Grand Total</td>
<td>3099</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2007-2008</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fail</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Humanistic Domain</td>
<td>227</td>
<td>53.3</td>
<td>3.5</td>
</tr>
<tr>
<td>Biomedical Domain</td>
<td>83</td>
<td>36.6</td>
<td>2.4</td>
</tr>
<tr>
<td>Both Domains</td>
<td>23</td>
<td>10.1</td>
<td>0.7</td>
</tr>
<tr>
<td>Pass</td>
<td>3249</td>
<td>93.5</td>
<td></td>
</tr>
<tr>
<td>Grand Total</td>
<td>3476</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2008-2009</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fail</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanistic Domain</td>
<td>229</td>
<td>50.2</td>
<td>2.6</td>
</tr>
<tr>
<td>Biomedical Domain</td>
<td>81</td>
<td>35.4</td>
<td>1.9</td>
</tr>
<tr>
<td>Both Domains</td>
<td>33</td>
<td>14.4</td>
<td>0.8</td>
</tr>
<tr>
<td>Pass</td>
<td>4124</td>
<td>94.7</td>
<td></td>
</tr>
<tr>
<td>Grand Total</td>
<td>4353</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2009-2010</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fail</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanistic Domain</td>
<td>199</td>
<td>52.8</td>
<td>2.7</td>
</tr>
<tr>
<td>Biomedical Domain</td>
<td>76</td>
<td>38.2</td>
<td>2.0</td>
</tr>
<tr>
<td>Both Domains</td>
<td>18</td>
<td>9.0</td>
<td>0.5</td>
</tr>
<tr>
<td>Pass</td>
<td>3644</td>
<td>94.8</td>
<td></td>
</tr>
<tr>
<td>Grand Total</td>
<td>3843</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.
The NBOME’s Blue Ribbon Panel is specifically charged with developing a plan to implement a two-decision point, competency-based model for COMLEX-USA that is consistent with both the NBOME’s mission and the direction of assessment standards in medical education and medical practice. The Panel is also tasked with the development of additional osteopathic medical assessment tools to fill any potential void created by the movement to a two-decision point model.

In order to ensure a comprehensive evaluation of the COMLEX-USA, both for its primary purpose as well as the important secondary uses of the examinations, the Panel is composed of NBOME Board Members and nominees from the other key organizations in medical education, assessment and licensure. (Please see next page for more detail).

The following is a summary of the Panel’s activities and progress in 2010:

- The Panel is chaired by Janice Knebl, DO, MBA, Professor of Medicine and Chief, Division of Geriatrics/Department of Medicine at the Texas College of Osteopathic Medicine/University of North Texas Health Science Center (UNTHSC/TCOM) at Fort Worth, and Vice-Chair of NBOME Board of Directors. Its primary objective is research and expert consensus on enhancing the COMLEX-USA licensure examination series, with the following priorities as a framework:
  - A Competency-based schema
  - Two decision points:
    1. Entering residency (supervised practice) and
    2. Entering independent practice
  - Integrate the application of biomedical sciences in all assessments as well as use of best evidence and appropriate information resources to address clinical presentations
  - Possible expansion of clinical skills assessment (further research and pilot testing is underway to confirm)

The Panel met twice in 2010, each time for a two-day meeting.
Some preliminary Panel consensus included:

› All seven (7) competency domains will likely be assessed across each “decision point.”
› Cognitive examinations will continue to provide numeric scores (vs. only pass/fail designation).
› Assessment for licensure could consider including elements of a portfolio model.
› The Panel would consider maintaining but adapting current COMLEX-USA examination blueprint and outline to consider competency domains.

Expected full implementation of a competency-based, two-decision-point COMLEX-USA examination series would occur in the 2015-2020 timeframe. The Panel is working to produce a more specific timeline by mid 2011. In the meantime, ongoing research includes practice analyses, surveys, and consultation/participation from international experts, and a study with osteopathic residents to pilot assessment of use of evidence-based medicine resources at point of care and higher-order communication skills challenges.

The NBOME’s initiative to research, develop and implement a competency-based COMLEX-USA series, which also incorporates assessment at the point of entry into independent practice, is clearly in the interests of quality patient care. It is entirely consistent with the NBOME’s mission to protect the public by providing the most appropriate means to assess osteopathic physicians, and I am proud that the NBOME Board is leading the future of osteopathic physician competency assessment with the best interests of the patient as a top priority.”

—Janice Knebl, DO, MBA
Chair, Blue Ribbon Panel

BLUE RIBBON PANEL
Organizations with representatives on the NBOME’s Blue Ribbon Panel:
› Federation of State Medical Boards
› American Osteopathic Association
› American Association of Osteopathic Examiners
› Council of Medical Specialty Societies (Organization of Program Directors Associations/Accreditation Council for Graduate Medical Education Program Directors)
› Association of Osteopathic Directors and Medical Educators
› American Association of Colleges of Osteopathic Medicine
› Educational Council on Osteopathic Principles
› NBOME
Throughout 2010, a number of academic journals published articles and letters to the editor based on the premise that there could, or should be, a direct correlation between scores for the COMLEX-USA examination series and scores for the United States Medical Licensure Examination series – the series of examinations taken by those pursuing medical licensure as an MD.

In response to these articles, the NBOME’s President & CEO, John R. Gimpel, DO, MEd, submitted three letters to the editor that were published in October 2010:

- Response to "Relationship Between COMLEX and USMLE Scores Among Osteopathic Medical Students Who Take Both Examinations"; Teaching and Learning in Medicine; October 2010.
- Response to "COMLEX-1 and USMLE-1 Are Not Interchangeable Examinations"; Academic Emergency Medicine; October 2010.

The desire for such a correlation is understandable. The primary purpose for both examinations is licensure, however, the NBOME recognizes that COMLEX-USA and USMLE scores are often used for secondary purposes, including residency program selection. With many osteopathic physicians applying to Accreditation Council of Graduate Medical Education (ACGME)-accredited residency programs, ACGME Program Directors are more frequently encountering COMLEX-USA scores. Many have requested a tool to translate a COMLEX-USA score to a USMLE equivalent for ease of comparing DO and MD candidates. In the view of the NBOME, however, such a comparison is neither appropriate nor desirable, and the letters to the editor highlighted the reasons why.

Below are the key points expressed about the osteopathic distinctiveness of the COMLEX-USA series of examinations, and why it is the most appropriate assessment tool for osteopathic physicians.

- COMLEX-USA is the recognized pathway to licensure for osteopathic physicians in all 50 states and a number of foreign jurisdictions. The Federation of State Medical Boards has undertaken a comprehensive review of COMLEX-USA and the United States Medical Licensing Examination (USMLE; www.fsmb.org/grpol_policydocs.html) and concluded that both are valid and reliable for their respective intended purposes, based on evidence that was found to be “exemplary.”
- Osteopathic medical students and residents train for the practice of osteopathic medicine. The curriculum of every osteopathic medical school incorporates distinctive osteopathic principles and prepares students for medical practice as osteopathic physicians, regardless of where they elect to complete the graduate medical education portion of their training. The COMLEX-USA incorporates these distinctive osteopathic principles, and it is constructed and validated based on practice patterns that are unique to DOs, including the use of osteopathic manipulative treatment.
- The osteopathic medical profession honors its contract with the public by ensuring osteopathic physicians are licensed based on results of the
COMLEX-USA, which is designed for the practice of osteopathic medicine and validated for that distinct purpose. Only the COMLEX-USA series assesses the skills and philosophy unique to the osteopathic medical profession.

Whether one knowledge examination predicts another (e.g., COMLEX-USA predicting USMLE) might be of some interest, but it would seem to pale in comparison to the importance of whether an examination such as COMLEX-USA or USMLE predicts performance of examinees in residency and in practice thereafter and also to predicting important physician competencies in addition to medical knowledge. (Please see box.)

The NBOME is committed to ongoing efforts to foster greater understanding of COMLEX-USA scores among all Residency Program Directors. We encourage Program heads and others who may be called upon to make judgments about osteopathic medical students, to take the time to understand COMLEX-USA, what it measures, how its standards are set and what COMLEX-USA scores mean. Additional information and a percentile conversion tool for COMLEX-USA can be found on the NBOME website (www.nbome.org).

The following research supports the correlation between COMLEX-USA scores and performance in residency:


COMLEX-USA and In-service Examination Scores: Tools for Evaluating Medical Knowledge Among Residents Susan C. Sevensma, DO; Gerri Navarre, MSW; Robert K. Richards, PhD. J Am Osteopath Assoc. 2008; 108: 713-716

COMLEX STANDARD SETTING IN 2010

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 examinations ensures the standards of osteopathic medical licensure assessment reflect current medical education and medical practice. The process is consistent with the NBOME’s mission of protecting the public by assessing competencies for osteopathic medicine and related health care professionals.

THE FOLLOWING STANDARD SETTING ACTIVITIES TOOK PLACE IN 2010.

› February – New standards for a passing score on the COMLEX-USA Level 3 examination were implemented.
› February – The COMLEX-USA Level 1 Standard Setting Committee met at NBOME Corporate Offices in Chicago to deliberate on pass/fail standards for the examination.
› February & March – The Standard Setting Committees for the COMLEX-USA Level 2-Performance Evaluation examination met on two occasions at the NBOME’s National Center for Clinical Skills Testing in Philadelphia to deliberate on pass/fail standards for the examination.
› May – New standards for a passing score on the COMLEX-USA Level 1 examination were implemented.
› July – New pass-fail standards for the COMLEX-USA Level 2-Performance Evaluation examination were implemented.

COMLEX Composite Committee

There are numerous committees that address the many and detailed components of developing the three levels (four examinations) in the COMLEX-USA licensing series. They include Item Review, Preliminary Exam Review, Final Exam Review, Case Development, Referencing and Standard Setting, just to name a few. In 2010, the Product Committee was eliminated and the COMLEX Composite Committee (CCC) was re-structured to provide “big picture” oversight of the COMLEX-USA series. The newly constituted CCC held its annual meeting in September.

The CCC is charged with the general oversight of the COMLEX-USA examination series, assuring the NBOME that the examinations are valid, reliable, and legally defensible. In addition, the CCC provides oversight for the COMVEX, COMSAE and COMAT examinations. The Committee oversees test development, test construction, psychometric and score reporting, quality assurance and standard setting. The CCC also monitors candidate feedback for these examinations, periodically reviews the examination blueprints, and provides reports to the NBOME Board.
The Cognitive Testing Department is responsible for developing, publishing, scoring and reporting on NBOME’s cognitive examinations including the COMLEX-USA series for initial licensure; COMVEX, for osteopathic physicians who need to demonstrate current osteopathic medical knowledge; COMSAE, a self-assessment tool used in preparation for COMLEX; and COMAT, which are subject examinations.

The department also provides test development and psychometric services for other osteopathic and health-related testing programs, and conducts research to support NBOME examinations and services.

To fulfill NBOME’s vision of becoming the testing organization for the entire osteopathic profession, in addition to the testing and psychometric services for other testing programs, in May, 2010 the Cognitive Testing Department supported the American Osteopathic Board of Pediatrics (AOBP) in successfully launching its first computer-based certification and recertification examinations. Also in 2010, the Cognitive Testing Department began working with the American College of Osteopathic Internal Medicine (ACOI) to convert its paper-pencil in-service examinations into web-delivered examinations. The ACOI web-delivered in-service examination is scheduled to be launched in early 2011. These collaborations developed after the NBOME supported the successful launch of a web-delivered in-service examination for the American College of Osteopathic Surgery (ACOS) in 2009.

COMLEX-USA, the licensure examination series for osteopathic physicians, is NBOME’s major product, and the Cognitive Testing Department continuously makes efforts to improve the quality of COMLEX items. In 2010, the Department held numerous in-house item writing training workshops for COMLEX-USA and COMAT item writers. In a two-day training workshop, item writers learned the essentials of item writing, wrote new items with the support of NBOME staff, and reviewed newly written items in a group setting. With the hands-on guidance and support as well as peer feedback, the quality of the items written and reviewed at the workshop was higher than new items typically written without such support. Participants enjoyed the experience, found it to be effective, and most expressed a desire to participate in future such workshops. Based on the results and feedback of these sessions, the Cognitive Testing Department plans to expand these in-house item writing training workshops in 2011.

COMAT

Development of the Comprehensive Osteopathic Medical Achievement Test (COMAT) subject examination series was a major focus of the Cognitive Testing Department in 2010. The COMAT Advisory Committee held a major planning meeting early in the year, at which the members established the foundation for all key aspects of the development and operation of the program.

To address the needs of the colleges of osteopathic medicine (COM), the Committee reaffirmed the NBOME Board’s requirement that COMAT be an osteopathically distinctive subject.
examination program, aimed at assessing the skills and philosophy unique to the osteopathic medical profession as incorporated into the curriculum of every COM.

In addition, the Committee affirmed:
 › Its content should reflect the latest development of the subject and consensus “best-practice” guidelines, linked to clerkship or course objectives.
 › Its structure and administration policy should allow frequent and flexible administration for the COMs.
 › Score reporting should provide psychometrically sound, and yet, sufficiently detailed performance information for both students and schools so the results will be valuable for educational diagnosis.
 › Above all, the Advisory Committee emphasized the security for COMAT and the need for proctoring as a requirement for any COM that planned to administer COMAT.

Following the direction of the Advisory Committee, seven discipline committees were organized, with the majority of members coming from the faculty of osteopathic colleges throughout the country. The discipline committees – based on the guidelines established by the COMAT Advisory Committee – developed content specifications based on review of broad expert consensus and best practices, wrote and reviewed new items, and constructed test forms for each of the seven disciplines. Parallel to the subject committees’ development activities, the Cognitive Testing Department also developed a web-based pilot COMAT examination to test the publishing, delivering, registration and administration mechanisms. Several hundred students from various COMs participated in the pilot program since July 2010.

In 2010, the COMAT committees and the Cognitive Testing Department made substantial progress in development of the series, and was on track for all seven COMAT subject examinations to be available for COMs to administer by early July 2011.

**COMSAE**

The Comprehensive Osteopathic Medical Self-Assessment (COMSAE) – introduced in 2008 – is a tool for osteopathic students and residents to gauge the base of their knowledge and ability as they prepare to take a COMLEX-USA licensure examination. There are three COMSAE Phases that correspond to the three Levels of COMLEX cognitive testing, with multiple forms for each phase. When it was launched, COMSAE had one test form for each Phase. In 2009 additional forms were added for Phases 1 and 2, and in early 2010, the NBOME published another new form for Phase 1 and Phase 2. As result, COMSE Phase 1 and Phase 2 both have three distinctive forms.

COMSAE continues to gain in use and popularity among candidates. The total number of COMSAE users in 2010 reached 7602, an increase of 74% from the previous year. There is an indication that more and more students are using COMSAE as a
reliable self-assessment tool. Based on NBOME study findings, candidates who have taken a timed COMSAE prior to taking their first COMLEX examination at the corresponding level demonstrate greater proficiency, on average, relative to candidates who did not take a timed COMSAE prior to their first COMLEX examination.

With candidate use of COMSAE steadily increasing since its introduction, COM faculty members have regularly requested the ability to view the examination. In response, in 2010 the Cognitive Testing Department began development of the COMSAE-Faculty Edition, which was scheduled to be available in early 2011. The COMSAE-Faculty Edition allows approved faculty members at COMs to see for themselves the format and question style of the COMSAE.

**RESEARCH**

The Department continued to be active in research for new product development, existing product improvement, and validity and reliability studies. Select results were submitted for publication and presentation. (Please see page XX for a comprehensive report on NBOMEs research efforts.)
CLINICAL SKILLS TESTING

Erik Langenau, DO
Vice President for Clinical Skills Testing

As the osteopathic profession continues to grow, so too does NBOME’s testing volume and capacity at the National Center for Clinical Skills Testing (NCCST). In the 2009-10 testing cycle, 4,061 candidates took the COMLEX-USA Level 2 Performance Evaluation (PE) examination in our expanded testing facility in suburban Philadelphia, Pennsylvania.

With more than 70 inches of snowfall in the Philadelphia area and severe flooding in 2010, keeping the center operational for students was not a small task. Special thanks not only to the candidates who made it to the NCCST on those snowy and stormy days, but also to Crystal Wilson, Med, NCCST Managing Director, the NCCST staff and standardized patients. Their dedication to the NBOME, and their perseverance, ensured that examinations were conducted during every scheduled session throughout the year.

Among many publications in 2010, we were pleased to publish candidate performance and survey data in the Journal of the American Osteopathic Association. The article, entitled “Five-year summary of COMLEX-USA Level 2-PE examinee performance and survey data,” was published in March 2010. Congratulations to my co-authors, Caitlyn Dyer, Dr. William Roberts, Crystal Wilson and Dr. John R. Gimpel on this accomplishment. Not only was the article a great summary of our examination, but it also demonstrated how satisfied students were with their experience at the NCCST. (Please see page XX for a comprehensive report on NBOMEs research efforts.)

Examination standard setting exercises were conducted in early 2010 for COMLEX-USA Level 2-Performance Evaluation as part of the routine practice of high-stakes testing. New standards were adopted by the NBOME in 2010 and successfully applied to the 2010-2011 testing cycle.

On April 16 and October 8, the NCCST hosted successful visitation days during which interested parties could tour the facilities, observe a clinical skills examination being administered, and learn more about clinical skills testing in general. These sessions continue to be a valuable resource for school and residency faculty, as well as licensing board representatives, to learn more about NBOME, COMLEX-USA Level 2-PE, examination and clinical skills testing in general.

Starting in June 2010, all eligible examination proctors and contracted standardized patients (SPs) were given the opportunity to enroll in NBOME’s health insurance program. We greatly appreciate the dedication of our proctors and SPs, and were proud to offer them this great benefit as a demonstration of the NBOME’s commitment to them, and in turn, their value to the NBOME. Proctors and SPs are instrumental to a high-quality examination experience for the thousands of candidates that are assessed at the NCCST each year.

As leaders in clinical skills assessment, NBOME staff members were invited to discuss clinical skills testing with the National Board of Examiners in Optometry (NBOE), the American Podiatric Medical Association (APMA), and the National Commission on Certification of Physician Assistants (NCCPA). Each of these organizations is working to either incorporate or modify clinical skills assessments within their respective licensure examinations.

In addition, the NBOME’s clinical skills staff took great pride and enjoyment in sharing their experiences and research with the osteopathic,
assessment and medical education communities throughout 2010. Our representatives made presentations at the:

- American Academy of Pediatrics (AAP) National Conference and Exhibition
- American College of Osteopathic Pediatricians (ACOP)
- American Educational Research Association (AERA)
- American Osteopathic Association (AOA) Annual Research Conference
- Association for Standardized Patient Educators (ASPE)
- International meeting for Simulation in Healthcare (IMSh)
- National Council on Measurement in Education (NCME)
- Ottawa Conference on the Assessment of Competence in Medicine and the Healthcare Professions

Over the next several years, we look forward to collaborating with our stakeholders and developing research initiatives, working to improve the clinical skills of clinicians as they care for patients.

The NCCST wrapped up the year with a very interesting research study involving first year residents. Nearly 50 participants participated in the study held at the NCCST in December to help investigate novel competency-based assessment tools such as advanced communication and team assessments, partial-task simulators, point-of-care resources, and integrated post-encounter assessments using multiple choice questions.

The osteopathic profession continues to grow. The Department of Clinical Skills Testing looks forward not only to meeting the clinical skills assessment needs of osteopathic medical candidates by way of the COMLEX Level 2-Performance Evaluation, but also, exploring opportunities for assessing a variety of competencies among candidates at different levels of training.
The work of the Communications Division had the most visible effect. Mary Coyle, Director for Communications, spearheaded an effort to create and introduce a new and more professional image for the NBOME. Working in collaboration with NBOME staff and leadership, the Communications Division – which had only recently been created – established graphics standards and a new visual identity system that was applied to existing vehicles, and established the benchmark for future materials. This new look was prominent in the 2009 Annual Report (published in June 2010), which has served the NBOME well with our communities as an image maker as well as a primary source of information about the organization. In addition, the new visual identity was translated to newsletters, marketing brochures, a bold and striking new conference display and other printed and presentation materials. This effort has helped to consolidate a professional look for the NBOME and gives us the tools to brand our products and services in the market going forward.

Another area of emphasis for the Communications Division was improved and increased information sharing with both internal and external constituents, based on consistent and foundational key messages that both delineate and support the NBOME’s objectives. The key development to support internal efforts was the creation of a monthly employee newsletter, In Touch, which regularly features a message from NBOME President & CEO, Dr. John Gimpel. In addition, Communications established and supported more regular contact and information sharing with the colleges of osteopathic medicine (COMs) and other key stakeholders.

The Information Systems (IS) Division added staff members in 2011 – primarily in desktop computing – to support the growth of the NBOME and our vision to be the testing organization for the entire osteopathic profession. IS continued a major redesign and reprogramming project for the Client Registration System, which is essential to a positive and efficient candidate experience when registering for a COMLEX examination. The project, which will complete in the first quarter of 2011, will improve our interface with our candidates and the deans’ offices at the COM’s, and will allow us to increase revenue without raising fees because of improved capabilities. At year-end, we were conducting a recruitment for new leadership within IS Division to further improve vision, performance and customer satisfaction.

Our Client Services Division experienced several changes during 2010. Using basic techniques for reporting and managing functions, we were able to identify opportunities for improvement by replacing labor-intensive activities – such as recovering passwords for candidates – with automated processes within our new registration system. We also evaluated our workflow and volume, and made adjustments to individual workloads to enable the...
NBOME to more efficiently serve our clients. Late in the year, we conducted Customer Service training to improve the quality of our telephone interface with candidates and deans’ offices. Besides improving the specific operational elements, we are preparing to integrate this unit within the Departments of Cognitive Testing and Clinical Skills Testing to allow more seamless interaction with the business unit.

The Testing Accommodation Committee, supported by Client Services, was active in 2010 with 63 applicants for Accommodation. New reports were developed for use by the staff and committees for understanding and managing their responsibilities. Staff and consultants attended the national Testing Accommodations Design forum in November, bringing back important information about the changes to ADA regulations and learning about practices for managing this important function.

**OPERATIONS**

In 2010, a major area of focus for the NBOME was the development and marketing of the Comprehensive Osteopathic Medical Achievement Test (COMAT) series of subject examinations for the COMs, with the marketing component coming under the responsibility of Vice President for Administration/COO.

The NBOME began marketing COMAT heavily at the 2010 American Osteopathic Association Osteopathic Medical Conference and Exposition in October. Using a brochure produced by the Communications Division, we showcased the highlights and benefits of the osteopathically distinctive subject examinations to the many attendees, including deans, department heads and student leadership. As the year was coming to a close, follow-up efforts were underway, with many COM representatives indicating their interest in COMAT and seeking additional information.

NBOME’s Administration Department also serves as the liaison to our General Counsel. That interface was robust in 2010, and resulted in revised agreements for Item Writers and Case Authors as well as a revised Confidentiality Agreement and technology use policy. Other important projects included legal considerations related to COMAT administration, enforcement of provisions of the NBOME Bulletin of Information, including test security and integrity, and agreements with other osteopathic associations establishing guidelines for data sharing.

Administration’s commitment to customer service showed up in many ways during 2010 and will be the focus of our 2011 agenda.
The NBOME expanded its staffing throughout the organization to focus on new products and continuous quality improvement. In the Department of Cognitive Testing, staffing increased to meet the greatly increasing use of COMLEX-USA and COMSAE examinations; the additional requests from specialty boards and colleges in areas of certification, recertification and in-service examinations; and the development of NBOME’s new Comprehensive Osteopathic Medical Achievement Test (COMAT) subject examination series. Numerous personnel joined the staff in 2010, including a senior director of test development, test development assistants, and additional item editing as well as research associate staff. In addition, approval for the hiring of a Senior Vice President for Cognitive Testing, who will be a DO based in our Chicago Corporate offices, was received. The Senior VP will provide overall leadership and content expertise to the department, and will focus efforts on continuous quality improvement for COMLEX-USA and other cognitive examinations. Approval to hire an Administrative Director for Cognitive Testing was also received. Recruitment for both of these key new positions for NBOME began in the fourth quarter of 2010.

The organizational growth was also evident in the creation of the Department of Innovations in Testing in mid-2010. This new department is directed by André F. De Champlain, PhD. Dr. De Champlain and his staff are responsible for developing, conducting and directing research and pilot testing aimed at improving the NBOME’s existing assessment products and generating ideas for new products and services in the area of physician competencies. Dr. De Champlain earned a bachelor’s degree in psychology, as well as both master's and doctorate degrees in educational measurement, statistics and evaluation, at the University of Ottawa in Ontario, Canada. He has been widely published over the past two decades and has received numerous awards for his expertise in assessments and research.

In the Administration Department, the NBOME welcomed Larry Turner as the Vice President for Administration/Chief Operating Officer. Mr. Turner heads a department that includes the key support areas of Communications, Client Services and Information Services. And as Chief Operating Officer, he plays an important role in implementing the NBOME’s strategic plan. Mr. Turner is a seasoned administrator with experience at a number of top-tier health care and educational institutions such as the Johns Hopkins Hospital in Baltimore, Maryland; Baylor College of Medicine in Houston, Texas; Emory University School of Medicine in Atlanta, Georgia; and the University of New England College of Osteopathic Medicine. Mr. Turner earned a bachelor’s degree from Rice University in Houston, Texas, and pursued graduate studies in business at the University of Houston.

In addition to the focus on staffing and organizational structure, the NBOME initiated a “One NBOME Team” approach across the organization. Beginning in 2010, NBOME senior leaders met quarterly to learn more about each department and provide a regular channel that would improve
communication and collaboration across all parts of the NBOME. Using the knowledge and expertise each participant brings to the table, the meetings have become a great outlet for discussing future initiatives and brainstorming solutions. In addition, senior leaders are better informed about activities that may impact their own areas, and have a greater ability to identify opportunities to collaborate. They are also better prepared to share vital information with their own staff, helping to keep everyone focused on achieving NBOME’s strategic objectives.

In the Finance Department, we continued to focus on the strategic goal of promoting the NBOME’s long-term financial stability. This is achieved by auditing fiscal reports and procedures at least annually, preserving and exploring new sources of revenue, and reviewing and implementing investment strategies. The NBOME had a financially stable year in 2010. As the number of products increase so does NBOME’s revenue and expenses. Each quarter the Finance Committee and Board of Directors reviewed and discussed NBOME’s statement of activities and statement of financial position.

NBOME continued to invest not only in additional personnel, but funding for product development and infrastructure. Highlights include a further expansion of the NBOME executive offices in Philadelphia, PA, to accommodate staff growth and a greater volume of meeting activity. NBOME also increased its funding for product development, improvement and research by more than 100%. Funding supported a patient safety tool and study developed by the Task Force on Continued Clinical Competence, and a research study to evaluate competency-based clinical skills assessment tools among first year residents. In addition, numerous task forces have been created to review established products in areas of pain management and our COMVEX special purpose examination.

Much gratitude goes to the NBOME’s Audit and Finance Committees. Creation of the Audit Committee was approved by the Board in 2009, and it met for the first time in 2010. Committee members worked with the NBOME’s external auditor to review the 2009 audited financial statements, tax reports and internal controls. The Finance Committee also had an active year in which it reviewed the proposed 2011 budget in May (six months earlier than previous years), invested funds in two fixed income accounts where returns can be increased, and updated policies pertaining to internal controls and investments.
More specifically, the department is charged with exploring new technologies relevant to computer-based examinations as well as clinical skills performance examinations, to ensure that COMLEX-USA and other NBOME products remain relevant and innovative with industry standards, medical education, and clinical practice.

ITD activities can be broadly categorized into one of the following four areas: (1) improve current aspects of COMLEX-USA, including expanding our current toolbox of assessments; (2) under the guidance of the Blue Ribbon Panel on Enhancing COMLEX-USA, lead staff efforts to re-conceptualize COMLEX-USA in light of competency domain-based frameworks; (3) help strategically position the NBOME to meet, in a significant fashion, maintenance of licensure (MOL) policy as outlined by the federation of State Medical Boards (FSMB); (4) drive research efforts that will position the NBOME as a preeminent testing organization on the domestic and international osteopathic medical education fronts. The ITD is developing a clear agenda that will focus on key deliverables in its four areas of activity, and as prescribed by the Board and other policy groups at the NBOME.

COMPLETED AND ONGOING PROJECTS AIMED AT EXPANDING MEASURED COMPETENCY DOMAINS
Several completed and ongoing collaborations at the NBOME directly address osteopathic physician competency, especially for those domains that do not readily lend themselves to more traditional modes of assessment. A clinical skills research study focused on first year residents was completed at the end of 2010. Its goal was to assess the extent to which clinical skills examinations lend themselves to measuring “21st century” physician competency domains, such as practice-based learning and improvement, as well as systems-based practice in osteopathic medicine. Several papers, focusing on key research questions aimed at measuring the latter competency domains, are currently in preparation. It is our hope that the results from these investigations will also provide valuable information as to whether clinical skills examinations can be applied to other candidate segments (e.g.: post-graduates) to reliably and validly measure these key domains.

Similarly, a student survey that will inform the ITD and the NBOME of the procedural skills taught at the undergraduate osteopathic medical school level was in development in late 2010 with implementation planned in 2011. The results from this survey will guide the efforts of the Blue Ribbon Panel regarding which procedural skills could be tested throughout the educational continuum, and possibly lead to the measurement of some basic procedural skills in any future revisions of the COMLEX-USA examination sequence. In conjunction with a similar survey recently completed at the post-graduate level, as well as a planned analysis of resident practice patterns, these studies will provide invaluable practice analysis data that will help to craft the revised COMLEX-USA
along the lines of current and evolving competency domain frameworks in medical education.

**CURRENT POST-LICENSURE EFFORTS AT THE NBOME**

Also in late 2010, the ITD developed a patient safety risk assessment tool, under the leadership of Dr. Joel Dickerman, Chair of the Patient Safety Task Force. The goal of this tool is to promote reflective self-assessment on the part of the osteopathic physician, based on the patient’s self-assessment of their risk for adverse medical events. It is hoped that this open patient-physician dialogue will contribute to a more positive culture of patient safety by promoting the development of systems to minimize future medical adverse events. This instrument also provides a mechanism by which dimension 1 of the FSMB’s Maintenance of Licensure model (reflective self-assessment) can be directly measured. A pilot study, aimed at assessing the psychometric properties of the instrument prior to wide-scale distribution was planned for 2011.

Additionally, the Task Force for Continued Fitness to Practice was appointed in 2010 to address how the NBOME and the ITD can develop products that will address key competency domains as they relate to residency assessments, maintenance of licensure, physician reentry, promoting patient safety and promoting osteopathic distinctiveness through assessment.

In closing, the ITD is pleased with the amount of activity and planning completed in 2010, and looking ahead, we are enthusiastic about further contributions aimed at improving the measurement of competencies throughout the spectrum of the osteopathic physician’s career, from undergraduate medical education to maintenance of licensure efforts. We are confident these efforts will fulfill the NBOME’s strategic vision and contribute more broadly to furthering the field of medical education.
New Brand Image Matches NBOME’s Reputation for Excellence

Following a decision in 2009 by the Board to professionalize the communications function and hire the NBOME’s first Director for Communications, the top priority for the new department in 2010 was to overhaul and upgrade the NBOME’s visual identity and firmly establish the NBOME brand.

“A clear and professional visual identity helps build and maintain an organization’s reputation; and consistent, disciplined presentation of the identity reinforces that reputation. The NBOME has established a reputation for quality products, world-class facilities and leading experts in the arenas of medical education and assessment. The updated NBOME visual identity reflects our strong reputation.”
—Mary Coyle, Director for Communications
The NBOME offers a wide variety of assessment tools, including COMLEX-USA (initial licensure), COMAT (subject examinations), COMPA (self assessment for COMLEX candidates), COMPRE (complete package for board examination) and COMVEX (variable purpose for licensed osteopathic physicians) and specialty board certification/recertification examinations. The NBOME tailors its test development services to meet its clients' unique needs.

The NBOME's vision is to be the testing organization for the entire osteopathic profession. We are proud to offer the Colleges of Osteopathic Medicine our COMAT series of subject examinations. Please visit us in the exhibition hall to learn more.

The NBOME wishes the AACOM and the AODME every success during their joint 2011 Annual Meeting.

Our vision, working for you.

The NBOME’s vision is to be the testing organization for the entire osteopathic profession.

We are proud to offer the Colleges of Osteopathic Medicine our COMAT series of subject examinations. Please visit us in the exhibition hall to learn more.
Supporting the Community

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.

LOCAL COMMUNITY ACTIVITIES:
› Through the American Cancer Society’s Denim Day, National Center for Clinical Skills Testing (NCCST) staff collected and made a donation to help fund women’s cancer programs.
› In December, NCCST staff collected donations for the Laurel House, a facility in Norristown, PA working to end domestic violence. More than 10 boxes of household items and clothing were donated.
› In December, NBOME Chicago staff participated in ChildServ’s Annual Toy Drive and provided toys for 13 boys and girls in their program/care. ChildServ is a child and family services organization, providing community-based programs to underserved children and families in the Illinois counties of Cook, Lake, and DuPage.

SUPPORT FOR MEMBERS OF THE OSTEOPATHIC COMMUNITY AND BEYOND:
› Following the devastating earthquake in Haiti in January, the NBOME made a charitable donation to DO Care International, a medical outreach organization dedicated to providing much-needed healthcare to indigent and isolated people in remote areas around the world.
› The NBOME was again a proud sponsor of a participant luncheon at the annual meeting of the American Association of Colleges of Osteopathic Medicine.
› In September, the NBOME was a proud sponsor of the International Association of International Medical Regulatory Authorities’ bi-annual meeting.
Research

Research is an important part of the development, administration and continuous quality improvement of the COMLEX-USA series of examinations, and other assessment tools developed by the NBOME. The structure of the NBOME’s research efforts is divided into three parts:

1 RESEARCH ADVISORY COMMITTEE
This committee is comprised of both staff and expert researchers from around the country, with areas of expertise including cognitive, clinical skills, evidence-based medicine, competency, and practice assessments. Under the direction of Tom Hardie, RN, EdD, Committee Chair, the Research Advisory Committee exists to stimulate, encourage and support intramural and extramural research. It also seeks to evaluate internal research with the advice and counsel of an advisory panel of experts, and provides an internal sounding board for external research presentations. The Committee sets standards and policy for research involving internal and external research projects and assures that guidelines are established and followed regarding the safety and confidentiality of subjects and investigators.

2 NBOME RESEARCH TEAM
Under the direction of Erik Langenau, DO, NBOME’s Vice President for Clinical Skills Testing, the global NBOME Research Team is comprised of staff from all three research departments – Cognitive Testing, Clinical Skills Testing and Innovations in Testing. The group’s task is to share research experiences and collaborate on various research projects.

3 DEPARTMENTAL RESEARCH TEAMS
Each relevant department – Clinical Skills Testing, Cognitive Testing and Innovations in Testing – 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; Linjun Shen, PhD, MPH, Vice President for Cognitive Testing and Research, heads the Cognitive Testing Research team; and André De Champlain, PhD, Director for Innovations in Testing, heads the Innovations in Testing Research team.

Collaboration between these departments and teams is quite strong, resulting in quality research projects, presentations and publications that promote the NBOME, our testing expertise and initiative, and the osteopathic profession as a whole. The opportunities for research, development and testing – including projects with external stakeholders – are exciting. 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.

BELOW IS A LIST OF ARTICLES, PAPERS AND PRESENTATIONS GIVEN BY OR SUBMITTED FOR CONSIDERATION BY NBOME STAFF IN 2010:

CLINICAL SKILLS TESTING DEPARTMENT

JOURNAL/BOOK PUBLICATIONS
2010; Accepted for publication.


Langenau EE, Sandella JM. Pass fail patterns of candidates who failed COMLEX-USA Level 2-PE due to misrepresentation of clinical findings on post-encounter notes. J. Am. Osteopath. Assoc. 2010; Accepted for publication.


Sandella JM. The stop phrase: standardized patients and the physical exam. Abstract presentation at: International Meeting for Simulation in Healthcare; January, 2010; Phoenix, AZ.

Sandella JM, Pugliano G. Candidates’ accuracy in recording a cardiac murmur on the COMLEX Level 2-PE examination. Oral presentation at: International Meeting for Simulation in Healthcare; January, 2011; New Orleans, LA.

Sandella JM, Pugliano G. Standardized patients and osteopathic manipulative treatment during the COMLEX-USA Level 2-PE. Abstract presentation at: American Osteopathic Association Annual Research Conference; October, 2010; San Francisco, CA.

Wilson C. Creating job descriptions and employee manuals. Oral presentation at: Association for Standardized Patient Educators 2010 Annual Conference; June, 2010; Baltimore, MD.

Zeltner A. Support staff 101. Oral presentation at: Association for Standardized Patient Educators 2010 Annual Conference; June, 2010; Baltimore, MD.

**CONFERENCE ORAL AND POSTER PRESENTATIONS**

Langenau EE. Dyer C. COMLEX Level 2-PE performance differences between left-handed and right-handed candidates. Abstract presentation at: American Osteopathic Association Annual Research Conference; October, 2010; San Francisco, CA.

Langenau EE, Montrey D, Dyer C, Roberts WL, Sandella JM. Relationship between standardized-patient checklist item accuracy and level of performing arts background experience. Abstract presentation at: 14th Ottawa Conference on the Assessment of Competence in Medicine and the Healthcare Professions; May, 2010; Miami, FL.

Pugliano G, Langenau EE, Roberts WL, Hostoffer R. Summary of ACOP Program Director’s Annual Reports for first year residents and relationships between resident competency performance ratings and COMLEX-USA test scores. Abstract presentation at: American College of Osteopathic Pediatricians’ 2010 Annual Spring Conference; April, 2010; Williamsburg, VA.


Sandella JM. The stop phrase: standardized patients and the physical exam. Abstract presentation at: International Meeting for Simulation in Healthcare; January, 2010; Phoenix, AZ.

Sandella JM, Pugliano G. Candidates’ accuracy in recording a cardiac murmur on the COMLEX Level 2-PE examination. Oral presentation at: International Meeting for Simulation in Healthcare; January, 2011; New Orleans, LA.

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Wilson C. Creating job descriptions and employee manuals. Oral presentation at: Association for Standardized Patient Educators 2010 Annual Conference; June, 2010; Baltimore, MD.

**SYMPOSIA AND WORKSHOPS**

Desai GJ, Benge CJ, Gallagher LA, Sandella JM, Rebbecchi TA. Training the rater: Improving objective feedback of learner performance on OSCEs. Workshop presented at: 9th Annual Conference of the Association of Standardized Patient Educators; June, 2010; Baltimore, MD.

Langenau EE, Carreiro J, Dowling DJ. American Academy of Pediatrics (AAP) Section Program for Section on Osteopathic Pediatricians (SOOP?): Review of pediatric osteopathic manipulative treatment (OMT) and recent advances in osteopathic research. Workshop presented at: AAP 2010 National Conference and Exhibition; October 2-5, 2010; San Francisco, CA.
COGNITIVE TESTING DEPARTMENT

RESEARCH ARTICLES


PAPERS PRESENTED TO PROFESSIONAL CONFERENCES


Zhang, O., Shen, L. & Li, F. Polytomous IRT or testlet model: An evaluation of scoring models under small testlet size situation. Paper to be presented at the International Objective Measurement Workshop meeting; April 2010; Denver, Colorado.

Shen L. & Li, F. An evaluation in test length of COMLEX. Paper presented at the 14th Ottawa Conference on the Assessment of Competence in the Healthcare Professions; May 2010; Miami, FL.

GENERAL RESEARCH


INNOVATIONS IN TESTING DEPARTMENT

The research function for the Department of Innovations in Testing was established in the fall of 2010 and its focus was on establishing a research agenda to be fully executed in 2011.
The NBOME National Faculty is comprised of the NBOME Board, Committee and Task Force members, as well as Item Writers. The numbers shown here represent the number of NBOME National Faculty in a given state.
The NBOME National Faculty is comprised of the NBOME Board, Committee and Task Force members, as well as Item Writers. The numbers shown here represent the number of NBOME National Faculty in a given state.
NBOME Committees

Hundreds of dedicated individuals all across the country support the NBOME’s mission of protecting the public with their work as part of our committees and task forces. The NBOME is grateful to the members of our National Faculty for their valuable contributions.

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**COORDINATOR:**
Mark Sandhouse, DO
NSU-COM

**VICE-COORDINATOR:**
Andrea Clem, DO

**OPP/OMM APPROVED ITEM REVIEW COMMITTEE**

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The NBOME undertook an objective evaluation of more than 200 item writers and case author who contributed to all levels of the COMLEX-USA examinations in 2010 and selected the Item Writers and Case Author of the Year:

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  - Kirksville College of Osteopathic Medicine

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

**Performance Evaluation, Case Author of the Year**
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### A Glossary of Acronyms

**ATSU-KCOM**: A.T. Still University of Health Sciences/Kirksville College of Osteopathic Medicine  
**ATSU-SOMA**: A.T. Still University of Health Sciences/School of Osteopathic Medicine in Arizona  
**AZCOM**: Arizona College of Osteopathic Medicine of Midwestern University  
**CCOM**: Chicago College of Osteopathic Medicine of Midwestern University  
**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  
**LMU-DCOM**: Lincoln Memorial University – DeBusk College of Osteopathic Medicine  
**MSU-COM**: Michigan State 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-COM**: Ohio University College of Osteopathic Medicine  
**PNWU-COM**: Pacific Northwest University of Health Sciences College of Osteopathic Medicine  
**PCOM**: Philadelphia College of Osteopathic Medicine  
**PCSOM**: Pikeville College School 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 – CA  
**TUNCOM**: Touro University Nevada College of Osteopathic Medicine  
**UMDNJ-SOM**: University of Medicine and Dentistry of New Jersey School of Osteopathic Medicine  
**UNECEOM**: 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  
**VCOM-CC**: Edward Via College of Osteopathic Medicine – Carolinas Campus  
**VCOM-Virginia**: Edward Via College of Osteopathic Medicine – Virginia Campus  
**Western U/COMP**: Western University of Health Sciences/College of Osteopathic Medicine of the Pacific  
**WVSOM**: West Virginia School of Osteopathic Medicine  
**WCU-COM**: William Carey University College of Osteopathic Medicine
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