COMLEX-USA At a Glance
What Residency Program Directors Should Know About COMLEX-USA

NBOME
NATIONAL BOARD OF OSTEOPATHIC MEDICAL EXAMINERS

Nearly 8,000 residents currently in ACGME programs are osteopathic physicians (DOs), and each year large numbers apply to ACGME programs. **COMLEX-USA** is the series of examinations osteopathic medical students take as a condition of graduation, and for medical licensure purposes. The NBOME acknowledges that important secondary uses of the examination do exist…**COMLEX-USA** scores are often considered, along with other key factors, when assessing osteopathic applicants for residency program selection. Here is some information and tools to help ACGME Residency Program Directors better understand **COMLEX-USA** — its construct, scoring and reporting, and correlation to residency performance.

- The **COMLEX-USA** series of examinations – created and administered by the National Board of Osteopathic Medical Examiners (NBOME) – is the recognized pathway to licensure for osteopathic physicians in all 50 of the United States and a number of international jurisdictions.
- **COMLEX-USA** 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, as incorporated into the curriculum of every college of osteopathic medicine. Only COMLEX-USA is designed based on the practice patterns of osteopathic physicians.
- Because of this, **COMLEX-USA** is the most suitable assessment tool to measure the competency of an osteopathic medical student or physician.

Scoring and Reporting

- **COMLEX-USA** uses "criterion-referenced" methodology for standard setting.
    - ◊ "Pass" is given if a candidate meets or exceeds the established passing score.
    - ◊ Passing means having met or exceeded the standard for competency.
- Score Reporting: 2-digit and 3-digit numeric standard scores for cognitive examinations; "pass/fail" determination for the COMLEX Level 2-Performance Evaluation clinical skills examination
- **COMLEX-USA** scores
    - ◊ Mean score – 500
    - ◊ COMLEX Level 1 passing score – 400
    - ◊ COMLEX Level 2-Cognitive Evaluation passing score – 400
    - ◊ COMLEX Level 2-PE – "pass/fail" determination
    - ◊ COMLEX Level 3 passing score – 350

Percentile Conversion Tool!

A score conversion tool available on www.NBOME.org allows you to quickly and easily convert a 2-digit or 3-digit score to a **percentile.**

Sample Conversions COMLEX USA Level 1 April 2008 (varies by testing cycle)

2 digit	3 digit	Percentile
96	700	99
92	650	96
89	600	89
85	550	73
82	500	51
78	450	28
75	400	10

The NBOME follows a rigorous scientific process for test/case development and validation to produce high-quality, valid and reliable examinations. The Federation of State Medical Boards of the United States (FSMB) has undertaken a comprehensive review of COMLEX-USA and USMLE (http://www.fsmb.org/grpol_policydocs.html), and concluded that both are valid and reliable for their respective intended purposes, stating: "the evidence supporting the validity of score-based inferences for COMLEX-USA" was "exemplary."[1] Please turn over for interesting research on the correlation between COMLEX-USA scores and residency performance.

1. Federation of State Medical Boards Website, http://www.fsmb.org/pdf/bd_rpt_08-1_cmles.pdf, accessed March 1, 2011.

Selected research supporting the correlation between COMLEX-USA scores and performance in residency

Predictive Validity of Osteopathic Medical Licensing Examinations for Osteopathic Medical Knowledge Measured by Graduate Written Examinations. Cavalieri, T.A., Shen, L, Slick, G.L. *J Am Osteopath Assoc.* 2003; 103: 337-342.

The purpose of this study was to evaluate the predictive validity of osteopathic medical licensing examinations for osteopathic medical knowledge measured by graduate written medical examinations. Performances on the three osteopathic initial licensing examinations, the three osteopathic internal medicine (residency program) in-service examinations, and the osteopathic internal medicine board certification examinations were analyzed for a cohort of the most recent osteopathic internal medicine board certification examination candidates (N = 82). Multiple regressions were performed for the predictive value of licensing examination scores for the later examination scores. Logistic regressions were used to predict the pass/fail status on board certification examinations from the pass/fail status of the licensing examinations. A longitudinal performance profile was constructed to assess the rank changes in decile on the examinations at different times. All correlation coefficients between the licensing examinations and other examinations were significant and higher than .70. The licensing examinations together predicted at least 60% of the variance of any of the other examination scores. The pass/fail status on the licensing examinations predicted 89% of the pass/fail status on the certification examination.

Full manuscript: http://www.jaoa.org/cgi/reprint/103/7/337?
maxtoshow=&hits=10&RESULTFORMAT=&author1=cavalieri&searchid=1&FIRSTINDEX=0&sortspec=relevance&resourcetype=HWCIT

Summary of ACOP (American College of Osteopathic Pediatricians) Program Directors' Annual Reports for First-Year Residents and Relationships between Resident Competency Performance Ratings and COMLEX-USA Test Scores Langenau EE, Pugliano G, Roberts WL, Hostoffer R. e-*Journal of the American College of Osteopathic Pediatricians.* 2010; 2(3).

The purpose of this study was to summarize ACOP Program Directors' Annual Reports of First-Year Osteopathic Graduate Medical Education (OGME-1) pediatric residents from 2005 to 2009, and to investigate the relationship between the competency ratings of residents as reported on the ACOP Program Director's Annual Report and COMLEX-USA scores. Conclusions: For pediatric OGME-1 residents, competency ratings drawn from the ACOP's Program Director's Annual Report are statistically related to COMLEX-USA examination scores.

Full manuscript: http://www.eric.ed.gov/PDFS/ED514030.pdf

COMLEX-USA and In-service Examination Scores: Tools for Evaluating Medical Knowledge Among Residents Sevensma S, Navarre G, Richards RK, *J Am Osteopath Assoc*. 2008; 108: 713-716

"In-service examination scores among Metro Health Hospital residents were generally correlated with COMLEX-USA score patterns and representative of all residents who took the examinations. As such, COMLEX-USA and specialty in-service examination scores are valid and useful tools to evaluate residents' medical knowledge."

Full manuscript: http://www.jaoa.org/cgi/reprint/108/12/713.pdf