

## **NBCE Exams: Better, Shorter, More Opportunities**

*Editor's Note:* This article was submitted by the NBCE for exclusive publication by *DC*.

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The NBCE is working hard to better serve the chiropractic profession, its state regulatory boards and the public. Here are just some of its recent accomplishments.

### **More Test Opportunities**

The NBCE's Written Exams department, led by Bruce Shotts, DC, developed a solution to computer-based testing on college campuses. Their work has resulted in 11 exam opportunities per year. CBT exams are on schedule to begin January 2019 as follows:

- Three opportunities to take Part I: January, April, August
- Three opportunities to take Part II: February, June, September
- Three opportunities to take Part III and Physiotherapy: March, July and October
- The schedule for Part IV Practical Exams remains unchanged: May and November.

When applications opened this fall, six months of exam dates were available.

### **Fewer Test Questions on Parts I & II**

The Department of Psychometrics and Research, led by Igor Himelfarb, PhD, reviewed Part I and Part II historical data to determine if a reduction in the number of items was feasible. The study showed that the optimal number of operational items is 40 for each exam domain. They then performed decision consistency studies, which supported the conclusion that reducing the number of items per domain to 40 would not affect an examinee's likelihood of achieving a passing or failing score.

### **Ground-Breaking Test Development on Part III**

In the collaboration between NBCE's Written Exams and Psychometrics, a new scoring model was proposed and evaluated for scoring Part III. This ground-breaking development resulted in the acceptance of a paper about this model titled "Two-Level Alternating Direction Model for Polytomous Items Violating Local Independence,"<sup>1</sup> which was presented in the world's most prestigious psychometric forum – the annual conference for the National Council on Measurement in Education (NCME) in New York. Acceptance of the paper involved rigorous peer-review by the world's best psychometricians.

"At the NBCE, we are confident that the exams we offer serve the chiropractic profession long after the testing is over," said Salvatore D. LaRusso, DC, NBCE president.

"Throughout its history, the NBCE assures practitioners, regulatory bodies, and the general public that chiropractors who pass our written and practical exams are well qualified to practice according to the standards of all 50 states.

"The NBCE's standards for psychometric performance of the exams are among the most meticulous in the industry," he continued. "By applying the newest research in testing and measurement, the NBCE brings lasting value to practitioner assessment and to the entire chiropractic profession."

### *Resources*

- American Educational Research Association, American Psychological Association, & National Council on Measurement in Education. *Standards for Educational and Psychological Testing*. Washington, DC: American Psychological Association, 2014.
- Dalkey N, Helmer O. An experimental application of the Delphi method to the use of experts. *Management Sci*, 1963;9(3):458-467.
- Himelfarb I, Shotts, BL. Two-level alternating direction model for polytomous items isolating local independence. Paper presented at 2018 National Council on Measurement in Education (NCME) annual meeting, New York, New York.
- Muraki E. A generalized partial credit model: Application of an E-M algorithm. *Applied Psych Measurement*, 1992;16:159-176.