

AMERICAN BOARD OF CLINICAL NEUROPSYCHOLOGY SPECIAL PRESENTATION

The American Board of Clinical Neuropsychology (ABCN), 2000 Update*

Robert J. Ivnik¹, Kathleen Y. Haaland², and Linas A. Bieliauskas³

¹Mayo Clinic, Rochester, MN, ^{2,3}Veterans Affairs Medical Center, ²University of New Mexico, Albuquerque, NM, and ³University of Michigan, Ann Arbor, MI

ABSTRACT

This paper updates neuropsychologists on the process of obtaining board certification in clinical neuropsychology through the American Board of Clinical Neuropsychology (ABCN), a specialty board operating under the auspices of the American Board of Professional Psychology (ABPP). At this time, the ABPP and ABCN have certified 406 clinical neuropsychologists, which makes it the largest board-certification organization in clinical neuropsychology. This article details the advantages of board certification through the ABCN and the four steps which must be passed in order to obtain board certification. These steps are: credential review, written examination, work sample, and oral examination.

It has been three years since the last review of the American Board of Clinical Neuropsychology (ABCN) appeared in *The Clinical Neuropsychologist* (Bieliauskas & Matthews, 1987, 1990, 1997). During that time there have been changes in the ABCN and in the American Board of Professional Psychology (ABPP), which is the federation of specialty boards to which ABCN belongs. The purpose of this article is to communicate those changes and to detail the process of obtaining certification in Clinical Neuropsychology through the ABCN.

ABPP is a federation of 11 member boards, each of which certifies psychologists in a different specialty area. ABPP came into existence in 1947 (Bent, Packard, & Goldberg, 1999) as an outgrowth, and on the recommendation of the American Psychological Association (APA, 1946). ABCN is the ABPP specialty board that deals with all issues relating to Clinical Neuro-

psychology. ABCN was formally incorporated as part of ABPP in 1984. ABCN has a board of directors composed of 15 members who serve 5-year terms and are elected by all board-certified neuropsychologists who are members of the American Academy of Clinical Neuropsychology (AACN). The board of directors of ABCN developed, maintains, and administers the ABPP-approved application, credential review, examination, and certification procedures which lead to ABPP certification in Clinical Neuropsychology (ABPP-CN).

AACN was established in 1996. It is legally independent from ABPP and ABCN, because it is not proper for certification organizations to engage in activities that might be construed as professional advocacy. With 394 active and 12 senior members, AACN is the largest membership organization of certified specialists in Clinical Neuropsychology. Acting on its members'

* Parts of this paper appeared in the *Newsletter of the National Academy of Neuropsychology*, (1999).
Address correspondence to: Robert Ivnik, Department of Psychiatry and Psychology (West 11-B), Mayo Clinic, Rochester, MN 55905, USA. Tel.: ++1 507 284-3985. E-mail: Ivnik.Robert@Mayo.edu

behalf, AACN is neither ethically or legally prohibited from entering into a wider range of activities than either ABPP or ABCN. It is free to serve the profession in any way that it chooses, including advocacy, education, and mentoring.

Board certification through the ABPP serves the public good by promoting competence in Clinical Neuropsychology. ABPP board-certified neuropsychologists also enjoy:

- The distinction of having passed the rigorous evaluation procedures of psychology's oldest, most respected, and only APA-recognized specialty certification organization: ABPP. There are over 3,000 ABPP fellows and over 400 ABCN fellows.
- Credentials that are recognized as important for faculty in psychology training programs. For example, the APA accreditation handbook (Office of Program Consultation and Accreditation, 1997) and the National Conference on Postdoctoral Training in Professional Psychology (APA, 1995) emphasize the importance of the ABPP diploma for training directors as an indicator of accomplishment and to serve as role models. The guidelines for doctoral training programs in Clinical Neuropsychology and the Houston Conference Proceedings (Hannay et al., 1998) also urge training directors and faculty to hold ABPP-CN certification. They further recommend that Clinical Neuropsychology training should produce practitioners who are eligible for licensure and ABPP-CN certification.
- Having credentials that are similar to those obtained by physicians through the American Board of Medical Specialties (ABMS). Like ABPP, the ABMS, which was established in 1934 and reorganized in 1970, is a federation of 23 separate boards, each of which certify in a different specialty area. As in psychology, there are many other boards in medicine (over 100), but only the 23 boards that are affiliated with ABMS are recognized by the American Medical Association. A board-certification model that is comparable to ABMS, and one in which the stringency of the examinations are similar, promotes parity between psychologists and physicians. The 67% pass

rates (1993 to 1998) for the written examinations in neurology through the American Board of Psychiatry and Neurology, an ABMS member board, are comparable to the 63% pass rates (1993 to 1998) of the ABCN.

- Having credentials that are recognized in many venues, including personal injury, forensic and managed care arenas, as the preferred indicator of clinical competence.
- Pay differential in the armed services.
- Licensure reciprocity for many states.

ABCN PURPOSES

As stated in its bylaws, ABCN exists for the following purposes:

- To arrange and conduct investigations and examinations to determine the qualifications of individuals who apply to the Board for certification of competence in Clinical Neuropsychology.
- To certify competence in the field of Clinical Neuropsychology for qualified applicants who have demonstrated advanced knowledge and skills in Clinical Neuropsychology, by virtue of education and training and by successfully passing all examinations required by the Board.
- To maintain a registry of persons who have passed the examination and are certified by ABCN and ABPP as having competence in Clinical Neuropsychology.
- To serve the public welfare by preparing and furnishing lists of persons who have been awarded certificates by the Board to proper persons and agencies.

The ABCN certifies practitioners as clinical neuropsychologists. It does not offer certification in just one aspect of Clinical Neuropsychology (e.g., child/pediatric) or as practiced in any single setting (e.g., private practice). Because of this, ABCN candidates must demonstrate advanced knowledge and skill in the general practice of Clinical Neuropsychology. If our profession decides at some point in the future to recognize subspecialty practice domains, the ABCN certification procedures will evolve accordingly.

ABCN PROCEDURES

ABCN accomplishes its purposes through evaluative procedures that have been developed during the last two decades. These procedures include:

- (1) Reviewing applicants' education, training, and supervised experience.
- (2) Requiring candidates to pass a written examination.
- (3) Requiring candidates to have a work sample reviewed and approved for use at the oral examination.
- (4) Requiring candidates to pass a three-part oral examination.

Credential Review

Persons aspiring to ABPP-CN certification begin by completing an ABPP/ABCN application form from the ABPP central office. Applicants must hold a doctorate in Psychology, be licensed, be free of unresolved or outstanding ethical complaints and violations, and be both trained and supervised in Clinical Neuropsychology. The ABPP reviews an application to insure that the applicant's general credentials are in order (e.g., doctoral degree, licensed) before the ABCN reviews the application for specialty-specific requirements (e.g., requisite neuropsychological course work, supervised experience).

The standards that are used to judge the credentials of applicants to the ABCN are based upon the year the applicant received the doctoral degree. Therefore, the ABCN standards are appropriate to the time period during which the applicant trained and have evolved as the profession has matured.

The supervision requirement provides an example of how credential requirements change by degree year. There is no formal supervision requirement for applicants who completed their doctorate before 1981. For persons who completed their doctorate between 1981 and 1989, 1,600 hours of clinical neuropsychological experience at the pre- or postdoctoral levels supervised by a clinical neuropsychologist are required. Persons who graduated after 1989 are required to have 2 years of clinical neuropsychological

training supervised by a clinical neuropsychologist, one year of which may be pre-doctoral. Applicants are encouraged to apply for board certification as soon as they have met all the requirements (e.g., upon completion of post-doctoral training).

The current "highest standards" for training in Clinical Neuropsychology are articulated in the policy statement of the proceedings of the 1997 Houston Conference on Training in Clinical Neuropsychology (Hannay et al., 1998). ABCN, the National Academy of Neuropsychology (NAN), Division 40 of APA, and other leading professional organizations have endorsed these proceedings. The Houston Conference outlined an integrated training model that is aspirational until training opportunities permit its implementation. Applicants to the ABPP and ABCN are not currently judged by Houston Conference standards. However, ABCN's board of directors monitors education and training opportunities and will eventually decide when to apply the Houston Conference standards.

After an applicant's credentials are accepted by ABPP and ABCN, the applicant becomes a "candidate" for ABPP-CN certification and is notified in writing of this fact. Under recently approved ABCN rules, every candidate has a maximum of 7 years from the date of their notification letter to accomplish all remaining steps in the ABCN certification process. *Candidates are responsible for monitoring their own progress toward ABPP-CN certification.* Candidates who do not achieve ABPP-CN certification within 7 years may begin the process anew without prejudice, starting with a new application.

The Written Examination

The written examination is intended to insure that candidates possess a sufficient breadth and depth of knowledge in Clinical Neuropsychology. Knowing everything about one or two areas of clinical neuropsychology is not sufficient to pass this exam.

A multiple-choice examination is recognized as the best way to achieve this purpose and ABCN contracted with the Professional Examination Service (PES) to develop and validate a written test. PES oversaw all aspects of develop-

ing, evaluating and updating the ABCN written exams. Early ABCN candidates took one of several different written exams, but the results did not contribute to their certification decision. These persons' responses were used to determine item difficulty levels, develop comparable versions of the test, and validate the written test.

The ABCN written examination was constructed by having practicing neuropsychologists submit multiple-choice questions about facts that they thought experienced clinical neuropsychologists should know. PES oversaw a multi-stage process during which other board-certified clinical neuropsychologists debated, refined, and eventually approved every question. The content areas covered in the written exam cannot be specified, but it is reasonable to anticipate that questions *might* relate to some of the following examples of content areas:

- Neuropsychological conditions (e.g., amnesia, dementia)
- The neurosciences (e.g., neuroanatomy)
- Normal development (both neurological and psychological)
- Psychopathology
- Clinical Neurology
- Psychometrics (e.g., test construction, standardization, validation)
- Ancillary neuro-diagnostic procedures (e.g., imaging, evoked responses)
- Experimental design or statistics

Only after ABCN and PES agreed that a scientifically developed, tested, and validated exam had been prepared did ABCN require that candidates pass the 100-item written examination. This is offered three times each year: at the annual meetings of INS (February), APA (August), and NAN (October or November).

The Work Sample

After passing the written examination, candidates submit a sample of their work composed of two cases that the candidate evaluated without supervision. Three board-certified neuropsychologists review each work sample. Candidates who identify themselves as working exclusively with either children or adults can have their work sample reviewed by fellows with similar expertise.

Reviewers judge the work sample against specific criteria to decide if it is acceptable for use at the oral examination. A majority vote of the three reviewers determines if the candidate will advance to defend the work sample during the ABCN oral examination. The work sample is utilized to assure that appropriate clinical material exists for assessing the candidate's knowledge and skill in a practice area that is *directly relevant to the candidate and that the candidate selects*.

If a work sample is not accepted, the candidate is given feedback about its weaknesses. If the candidate believes that the work sample was rejected due to a procedural error (e.g., bias because the candidate uses a particular approach to clinical neuropsychological evaluation), they have the right to appeal the decision within 60 days. If an appeal is not made, the candidate may repeat the work sample review process as many times as needed within the 7-year time limit. New reviewers are selected to evaluate each re-submission, and these new reviewers never know if they are reviewing a first or a later submission.

After the work sample is accepted, the candidate may take the oral examination whenever it is next offered.

The Oral Examination

The oral examination, which is the final step in the ABPP-CN certification process, is offered twice each year, in May and October, in Chicago. One of the goals of the oral examination is to examine candidates in a collegial and supportive atmosphere. The oral examination presents candidates with situations that allow them to demonstrate the breadth and depth of their professional experience, knowledge, skill, and reasoning ability. While "correct" answers are important, the three-person oral examination committee works to discover how the candidate conceptualizes, evaluates, and manages neuropsychological problems. A well-reasoned and scientifically defensible, but "incorrect" diagnostic conclusion or treatment plan may be better received than a technically "correct" conclusion that was arrived at despite weak knowledge or faulty reasoning.

The oral examination begins with a general orientation to the examination. This is provided in a group format to all of the candidates being examined on that day. Before the oral examination begins, candidates sign a confidentiality agreement. This confidentiality agreement protects candidates' privacy and the integrity of the examination. This agreement requires that candidates should not divulge the names of *any other* candidates who were present at the same oral examination. Examiners also sign this agreement.

The oral examination has three components: Fact Finding, Work Sample, and Ethics & Professional Responsibility. Each of these components is allocated 40–50 minutes. A three-member team examines each candidate, and a different member of the team conducts each part of the exam. Although it cannot be guaranteed, every attempt will be made to include one to two examiners in pediatric or adult neuropsychology, depending on the candidate's expressed preference. Each examiner rates the candidate's performance on (1) Evaluative Skills, (2) Intervention Skills, (3) Scientific and Professional Knowledge, (4) Ethics and Social Responsibility, and (5) Professional Commitment. After the oral examination is completed, the Examining Committee discusses the candidate's performance and decides whether the candidate "passes" or "fails" based upon a review of their performance on all parts of the oral. Candidates either pass or fail the entire oral; they do not pass or fail the separate components of the exam. The final decision requires a majority vote of the three examiners.

Candidates who fail the oral examination may appeal that decision. However, appeals can only be granted on procedural grounds and must be made within 60 days of receiving the letter of failure. If the examination procedures were not followed, or if something happened that compromised the examination's fairness, appeals are appropriate. An appeal is first reviewed and adjudicated by the ABCN Appeals Committee. This decision may, in turn, be appealed to the ABPP Appeals Committee. Candidates who successfully appeal may re-take the oral examination without prejudice.

The remainder of this section discusses each of the three parts of the oral examination in more detail.

The work sample component

This part of the exam presents an opportunity to evaluate the candidate's knowledge and skill in an area of neuropsychology selected by the candidate. The examiner assumes that the candidate is well prepared to discuss and defend all aspects of the work sample. The examiner may question the candidate about specifics of the cases presented, or challenge candidates to explain and defend their work based on current professional standards, scientific knowledge, or research findings. The examiner may inquire about any issue that is relevant to the case, including the scientific basis for conclusions.

The fact finding component

This section of the exam requires the candidate to evaluate a neuropsychological problem *de novo*. Candidates have no advance knowledge of the case that will be used for fact finding, other than knowing that they can choose either a child or an adult case. The fact finding component presents each candidate with a similar clinical problem, and the examiner watches how the candidate collects, organizes, evaluates, weighs, and integrates information, conceptualizes the case, constructs differential diagnoses, and prepares recommendations for managing the problem.

The cases that are used for the fact finding component are real cases selected from the practices of ABPP-CN fellows. They are chosen because they present problems that an appropriately educated, trained, and experienced clinical neuropsychologist should be able to evaluate, diagnose, and manage. The fact finding component simulates a neuropsychological evaluation in a condensed time-frame.

The ethics and professional responsibility component

This component has two purposes. The first is to examine the candidates' knowledge of and sensitivity to ethical issues. The second is to learn about the candidates' professional practice and

to evaluate their professional commitment and involvement.

During the ethics portion of this component, candidates read a short vignette that illustrates ethical and professional practice issues. Candidates must identify the relevant issues, explain the ethical principles involved, and articulate the basis for the principle. Knowing an ethical principle's title is neither required nor sufficient. Candidates' answers are judged relative to the APA's *Ethical principles of psychologists and code of conduct* (1992).

During the professional responsibility portion of this component, the examiner seeks to understand how the candidate functions as a clinical neuropsychologist on a daily basis and to ascertain their awareness of and sensitivity to professional issues. This information provides a context in which the candidate's performance throughout the oral examination can be judged. The examiner inquires about the candidate's training, clinical practice, professional involvement, and views about important issues in psychology.

PREPARING FOR THE ABCN PROCEDURES

Persons interested in pursuing ABPP and ABCN certification frequently have questions relating to the written application or how they might prepare for the other elements of this certification process. ABPP and ABCN work to insure that every applicant and candidate is fully and accurately informed about all of their policies and procedures. However, as these organizations are both devoted to the fair examination and certification of professional psychologists, a conflict of interest would exist if ABPP or ABCN undertook to *both* mentor *and* evaluate clinical neuropsychologists. Hence, neither ABPP nor ABCN, as organizations, endeavor to assist, support, or mentor applicants or candidates beyond a procedural level.

ABPP- and ABCN-certified clinical neuropsychologists are not, however, precluded from

offering such assistance, either individually or as a group. Similarly, the AACN – the membership organization of ABPP- and ABCN-recognized clinical neuropsychologists – has no ethical or legal constraints in these areas. In addition to promoting its members' interests, AACN offers several services that support ABPP and ABCN candidates.

Quality Assurance and Continuous Improvement

Each aspect of the ABPP-CN certification process is monitored, rated, and evaluated. This information is used to improve the process.

- The written exam is regularly evaluated and updated, as previously described.
- Oral examiners undergo training before they examine any candidate.
- All oral examiners participate in a workshop the day before each oral examination session begins where all examination procedures, performance standards, and outcome criteria are reviewed.
- The examiner who conducts the work sample portion of the oral examination rates the quality of each work sample reviewer's written critique and suggested questions. Poor ratings may keep a person from reviewing future work samples.
- ABCN officials observe some of the oral examination exercises. These observers rate the examiner's performance. The observers, who are senior members of our profession and experienced examiners, also assure procedural fairness. Oral examiners who receive poor ratings will not be asked to serve as an oral examiner again.
- After completing the last oral examination exercise, but before learning the results, every candidate anonymously rates each of the examiners on behaviors that are important for conducting a fair examination. Oral examiners who receive poor ratings from the candidates are not invited to future oral examinations.

CONCLUDING COMMENTS

It is not easy to become board certified by the ABCN. If ABPP-CN certification were easy, neither the ABPP nor ABCN would meet their obligation to serve the public by establishing fair but rigorous evaluation standards. Nevertheless, attaining board certification through the ABCN is not unrealistically difficult. As can be seen from the figures below, the majority of those who take the examination pass.

The ABCN monitors pass rates at various stages of the process. This is the basis for the following comments:

- Appropriately educated, trained, supervised, and experienced clinical neuropsychologists rarely, if ever, fail the application and credential review stage.
- The written examination pass rates are usually in the 60–70% range. The pass rate for 1993–95 was 65% and for 1996–98 was 59%.
- ABCN does not keep statistics on how often candidates resubmit work samples, but it is rare to submit more than two work samples. The pass rate in 1998 was 75%.
- The oral examination's pass rates are usually in the 60–70% range. The pass rate for 1996–98 was 65% and for 1997–99 was 70%.
- It is not unusual for candidates who eventually become ABPP-CN fellows to repeat one of these stages.

ABCN serves the public by reviewing, examining, and certifying clinical neuropsychological practitioners. The evolution of ABCN's standards and procedures has paralleled our profession's maturation. Clinical neuropsychologists achieve ABPP-CN fellow status by completing rigorous, but fair, credential review procedures and both written and oral examinations. An applicant's academic status is irrelevant to the ABPP and ABCN reviews. Indeed, the majority of those who have ABPP-CN board certification have no formal academic affiliation or appointment. Any appropriately educated, trained, supervised, and experienced clinical neuropsychologist should be able to obtain ABPP-CN certification; however, it takes some candidates more than one attempt.

ABPP, ABCN, and AACN are proud of their history, tradition, and commitment to the profession's highest standards. All those trained in Clinical Neuropsychology are invited to apply to take the ABCN board-certification examination and participate in upholding the standards and health of our profession.

Application Materials

Persons wishing to pursue ABPP-CN certification should write to the ABPP central office for the ABPP and ABCN application materials:
 American Board of Professional Psychology
 514 East Capitol Avenue
 Jefferson City, MO 65101
 Tel: ++1 573 634-5607.
<http://www.abpp.org>

REFERENCES

- American Psychological Association (1946). *Report of the policy and planning board on certification of professional psychologists*. Washington, DC: Author.
- American Psychological Association (1992). Ethical principles of psychologists and code of conduct. *American Psychologist*, *47*, 1597–1611.
- American Psychological Association (1995). *Education and training beyond the doctoral degree: Proceedings of the American Psychological Association National Conference on Postdoctoral Education and Training in Psychology*. Washington, DC: APA.
- Bent, R.J., Packard, R.E., & Goldberg, R.W. (1999). The American Board of Professional Psychology, 1947 to 1997: A historical perspective. *Professional Psychology: Research and Practice*, *30*, 65–73.
- Bieliauskas, L.A., & Matthews, C.G. (1987). American Board of Clinical Neuropsychology: Policies and procedures. *The Clinical Neuropsychologist*, *1*, 21–28.
- Bieliauskas, L.A., & Matthews, C.G. (1990). The American Board of Clinical Neuropsychology, 1990 update. *The Clinical Neuropsychologist*, *4*, 337–343.
- Bieliauskas, L.A., & Matthews, C.G. (1997). The American Board of Clinical Psychology, 1996 update: Facts, data, and information for potential candidates. *The Clinical Neuropsychologist*, *11*, 222–225.
- Hannay, H.J., Bieliauskas, L.A., Crosson, B.A., Hammeke, T.A., Hamsher, K.deS., & Koffler, S.

- (Eds.) (1998). Proceedings of the Houston Conference on Specialty Education and Training in Clinical Neuropsychology: Policy statement. *Archives of Clinical Neuropsychology*, *13*, 160–166.
- Office of Program Consultation and Accreditation, Education Directorate, American Psychological Association (1997). *Book 1: Guidelines and principles for accreditation of programs in professional psychology*. Washington, DC: APA.
- Reports of the INS-Division 40 Task Force on Education, Accreditation, and Credentialing (1987). *The Clinical Neuropsychologist*, *1*, 29–34. [N.B. This contains the three reports for doctoral, internship, and residency programs. It is also reprinted in K.M. Adams & B.P. Rourke (Eds.) (1992). *The TCN guide to professional practice in Clinical Neuropsychology*. Amsterdam: Swets & Zeitlinger (pp. 7–12).]