

Preparing for the ABPP Board Certification
Examination in Clinical Neuropsychology Part 2:

Practice Sample Submission
and Defense

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Background

- Pediatric Neuropsychologist
- Children's Healthcare of Atlanta (CHOA)
- Adjunct faculty, Emory U. School of Medicine
- ABPP-CN Board Certification (2011)
- Subspecialist in Pediatric Neuropsychology (2015)



Disclosures

- Currently on ABCN Oral Examination team
- Previous Practice Sample (PS) reviewer
- No conflicts of interest to report



Objectives

- Understand the PS submission process
 - Describe what must be submitted in a PS
 - Define characteristics that make a PS likely to be defensible in the oral exam
 - Describe issues considered in the PS review
- Introduction to the PS Oral Exam process
 - Describe the components of the PS defense



Phases in Board Certification process...

- Phase 1: Evaluate Training and Knowledge
 - Step 1: Credential Review
 - Step 2: Written Exam
- Phase 2: Evaluate Clinical Competence
 - Step 1: Practice Sample Review
 - Step 2: Oral Exam



Practice Samples

- Submission
 - Overview
 - Format
 - Good Cases to Submit, Cases to Avoid
- Review Process
 - What Reviewers Consider
 - Relevant/Irrelevant Review Issues
- PS and Artificial Intelligence
- Introduction to Oral Exam Defense of PS



PS Submission: Overview

- Two Neuropsychological cases from your practice
 - Seen as an independent provider
 - Sufficiently different to demonstrate breadth of your knowledge and clinical practice
- Demonstrate practice of clinical neuropsychology at the specialist level of competence.



PS Submission: Overview

- Submission consists of:
 - Two case reports
 - Score summary sheets
 - Raw test protocols
 - Optional Supplementary material
- Submitted through the ABCN portal
- Fee for submission



PS Submission: Overview

- Reviewed by 3 ABPP Diplomates
 - Reviewed for acceptability for use at oral examination
 - Rated as either "acceptable" or "not acceptable"
 - At least 2 reviewers must rate sample "acceptable"
- Reviewers provide questions to the future oral examiners based on the PS



Practice Sample: Format

- Clinical reports must be the **complete** and **original** work of the candidate
 - It is acceptable to have used a technician
 - But not a trainee who played a role in conceptualization, diagnosis, and interpretation
- Stand-alone neuropsychological report
 - Not part of a multidisciplinary document



Practice Sample: Format

- Reports can be submitted on cases in which tests were conducted in Spanish
 - *At this time the report must be written in English*
 - *PS Reviewers will be competent in reviewing reports with tests administered in Spanish*
- At this time ABCN cannot accept PS conducted in languages other than English or Spanish.



Practice Sample: Format

- Original report may be modified only to the extent that identifiable information is removed.
 - Information identifying the **candidate by name or their institution** (e.g., signature line, letterhead)
 - Information identifying the **patient or other individuals**
 - Patient name or address (including city and state) birthdate [please substitute age] or other PHI.
 - Patient's employer and in some cases a specific occupation, and names of referral sources



Practice Sample: Format

- If exact dates would potentially identify the client (usually they will not), then provide:
 - month/year or
 - time since onset or
 - time in relationship to time of the NP evaluation
- Reviewers should be able to follow onset and course of events in the report



Practice Sample: Format

- De-identify:
 - Substitute generic name (i.e., Jane Doe)
 - Dark marker on scanned documents
 - Do not de-identify digitally (i.e., place bars over text)



Practice Sample: Format

Test Score Summary Table

- Test name, raw score, transformed normative score and normative source
- Type of score must be identified (e.g., raw, percentile ranks, standard scores, T-scores, etc.)
- If abbreviations are used, provide a key relating abbreviations to the full test titles
- Acceptable to profile certain results, especially if commonly presented that way (e.g., MMPI-2)



Practice Sample: Format

Scanned Raw Test Data

- All test protocols, drawings, writing samples
- Printouts of computerized score reports
- Make sure quality of scanned reproduction is clear and legible to the reader
- Remove identifying information from all raw test data and printouts



Practice Sample: Format

Supplementary Materials (Optional)

- Brief
 - No more than 3 pages (Double-spaced, 12-pt-font)
- Addresses issues not included in report
 - Differential diagnostic consideration
 - Constraints of population affecting case selection
 - The range of clinical decisions considered in cases



Practice Sample: Subject Matter

- Evaluations typically are from different clinical disorders and address different questions
- Can have a treatment emphasis
 - Must include neuropsychological evaluation results
 - Describe how the findings form the basis for the interventions employed
 - Provide evaluation of efficacy of the interventions



Practice Sample: Content

- Neuropsychological case conceptualization
- Consideration of brain-behavior-diagnostic relationships
- Typical report from your practice
- Sample should show the candidate is practicing Clinical Neuropsychology **at the specialist level of competence** (Entry Level or Above)



Good Cases to Submit



Good Cases to Submit

- Cases that demonstrate a breadth of knowledge and clinical practice
 - Separate clinical disorders that address different clinical questions
 - Different age ranges
 - Not necessarily different test battery
- Report conveys how findings help form the conclusions (i.e., your thought processes)



Good Cases to Submit

- Cases are not expected to be a treatise or contain a review of the literature
 - Most clinical reports do not include citation references or a detailed discussion of potential differential diagnoses
- Short reports are acceptable
 - But use the supplementary material to explain why and lay out the logic for your conclusions



Cases to Avoid



Cases to Avoid

- Research cases
- Excessively long reports
 - Often medical-legal type reports
- Cases that are not clear-cut where there may be legitimately different conclusions
- Cases in highly controversial areas (e.g., CTE)



Cases to Avoid

- Cases in which you cannot discuss brain-behavior-disease/disorder-context relationships
- That is, cases such as:
 - Cases of extreme impairment where most/all test scores are in the extremely low range
 - Cases with all normal findings
 - Cases with very minimal testing (e.g., screening)
 - Psychoeducational evaluations
 - Cases where psychological issues are main factor



Practice Sample: Review Process



PS Review Process

- 3 trained PS reviewers
- If 2 or 3 approve = PS Accepted
- All 3 reject = PS Not Accepted
- If only 1 of 3 approves, sent to 4th reviewer
 - 4th reviewer approves = PS Accepted
 - 4th reviewer rejects = PS Not Accepted
 - 4th reviewers are current or past ABCN board members or oral examiners



Reviewer's Decision

- "Acceptable" means the PS as a whole demonstrates competent clinical practice
- Candidate has a reasonable potential to defend the samples in oral examination
 - Address concerns or weaknesses identified
 - Reviewers do not have to agree with, or even "like" your test battery
 - Your approach does not have to be the same approach the reviewer would take



PS Review Outcomes

- **Acceptable:** If the sample is acceptable, applicant moves on to the Oral Examination
- **Not Acceptable:** If not acceptable the applicant is asked to submit two new cases
 - In past, reviewers could suggest submission of only one new case, but now **both cases must be new cases.**



Non-accepted Practice Samples

- Comments about **strengths and weaknesses**, and **suggestions** to help with subsequent PS
- Candidate repeats the PS submission process (**using new case material**) until PS is rated as "acceptable" for use at the oral examination
 - New fee for each submission
 - If 7-year candidacy period expires, candidate **restarts** entire process with new credential review



Non-accepted Practice Samples

- Because there is no limit on number of PS that can be submitted during candidacy, there is a **very low non-acceptance rate**.
- L. Bieliauskas: Examined a cohort of 471 candidates from 1993 to 2003.
 - Only 0.42% did not succeed on all PS attempts



What Reviewers Consider



What Reviewers Consider

- Sufficient diversity is present to demonstrate a **breadth of clinical proficiency**
- The **reason for the evaluation** is clear and any referral issues are addressed
- Reasonable presentation of the history of the present illness/presenting condition
- Report captures the context of the symptoms, illness, or dysfunction
- There is some coverage of relevant past history and background **as appropriate**.



What Reviewers Consider

- Assessments a reasonably comprehensive approach to address diagnostic/management issues in the case
- Cognitive and psychological domains are adequately assessed (e.g., language, visual-spatial, attention, etc.)
- Tests were correctly administered and scored
- Data accurately reported and clearly presented
- Proper selection of normative reference group
 - Reasonable match between patient and normative reference sample (**diversity considerations**)



What Reviewers Consider

- Interpretation demonstrates knowledge and integration of brain-behavior relationships
 - **PS Cases should lend themselves to a neuropsychological conceptualization**
 - **Brain-behavior-diagnostic relationships**
- Addresses the clinical question and meets the needs of the identified consumer(s)



What Reviewers Consider

- Conclusions supported by data and reflect current standards of **evidence-based** practice
- Historical and medical factors **identified**, and these **inform** diagnostic formulation and recommendations
- Treatment recommendations are individualized (not formulaic), appropriate, reasonable, and provided in sufficient detail to foster their implementation



What Reviewers Consider

- Emotional and psychopathological factors are appropriately assessed and incorporated into the report
- Individual and cultural diversity issues are taken into account in test selection, normative references group used, and case formulation
- Any legal/ethical issues raised in the evaluation are identified and managed appropriately



What Reviewers Consider

- Consultations with other professionals are appropriate and documented accordingly
- Appropriate referrals for other consults are considered and recommended
- Clinical report written in a clear, professional style tailored to the background and needs of the identified primary consumer of the report



What could make a practice sample not defensible?

- Outdated tests used without good reason or explanation
- Blatantly inappropriate norms
- No attempt to address the referral question
- An evident lack of knowledge of fundamental neuropsychological principles
- Clear evidence of an ethical violation
- Egregious scoring errors that undercut the conclusions



Irrelevant Review Issues

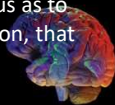
- Style of the report
 - “Narrative” versus “Tabular” results
 - “Test scores reported” vs “Performance” described
 - “Standard scores” vs “Percentiles” vs “Not reported”
- Failure to use:
 - A particular test
 - A particular test battery
 - A particular theoretical approach
- Similar battery for both cases:
 - Not necessary to have different batteries



Not Fatal Flaws

(Reviewers are told “There are no fatal flaws”)

- **Older versions of tests:** If the patient is a good match for the normative sample of a test (e.g., age, education, race) and the stimuli of the test are still valid, earlier versions of a test can be valid for use
- A few minor **scoring errors** do not invalidate PS.
 - If scoring errors are large or so numerous as to fundamentally affect the case formulation, that may be a basis for a non-acceptance.



Not Fatal Flaws

- No Performance Validity Test(s):
 - However, some attempt at characterizing validity or effort should be included.
- Appropriate judgment to determine if formal **tests of effort** need to be included.
 - Performance validity tests should be included in clearly forensic cases
 - May not be necessary in certain dementia or acute rehabilitation cases



Not Fatal Flaws

- No or limited testing of psychological or mental health issues
- **History and medical factors** may be dealt with by omitting non-contributory material.
 - Every detail of medical or social history need not be mentioned if these do not contribute to case formulation.
 - Some settings may lend themselves to candidates including minimal history in clinical reports



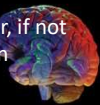
Not Fatal Flaws

- Omitting **handedness** is not a reason for PS not to be accepted
- Some **patient identifying information** on raw test data may have been missed, when a clear, good faith effort is evident throughout the PS
- Not including an “expected” specific **recommendation** (e.g., advanced directives, will, trusts, etc. in a dementia evaluation)



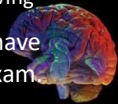
Not Fatal Flaws

- An extensive **differential diagnosis** need not be explicitly presented in the report, but:
 - There should be a clear diagnostic conclusion that is supported by the evidence.
 - Assessment process and the candidate’s impression should reflect an understanding of competing hypotheses suggested by the evaluation findings.
- This may be in the supplemental material or, if not present, be defensible on Oral Examination



Professional Data Sheet

- Included with PS submission:
 - Name, doctoral degree, institution, date awarded
 - Internship site, list of positions held since the awarding of doctoral degree, with dates
 - Outline of activities performed in present work setting, including percentage of time for each
 - Types of patients or clients currently serving
- Only one member of exam team will have access to Data Sheet at time of oral exam.



ABCN Policy on use of AI

- ABCN has recently introduced a policy on use of AI in Neuropsychological Report Writing
- ABCN recognizes that rapid technological advances such as AI and large language models (LLMs) may be used to help write evaluation reports.
 - AI can be used to enhance readability and efficiency
- ABCN BOD will review the policy annually to ensure it remains up to date with advances in technology.



ABCN Policy on use of AI

1. Responsibility:

- Neuropsychological integration and conceptualization must be the independent cognitive work of the candidate.
- AI can not be used to interpret results, integrate findings, or conceptualize the cases used as part of the practice samples.

2. Transparency:

- Use of AI must be transparent to the Board and to the public.

3. Privacy:

- Candidates protect confidentiality of data used with AI tools.
- AI models must not be trained with data that includes PHI.



ABCN Policy on use of AI

Procedures to follow when using AI to generate practice samples for Board Certification:

1. Neuropsychologist must obtain written consent from patient when using AI in clinical practice.
2. Samples must be labeled as having included use of AI.
3. Candidate must disclose how and where they used AI technology in the PS. This includes wording in the report and queries that were used to generate wording.
4. Candidate must explain what AI program was used, how harms were avoided, how reliability of AI program was ensured, how quality checks were performed to ensure working was correct.



Preview: PS Defense in the Oral Exam....



Practice Samples Defense

- The Candidate needs to be able to demonstrate:
 - Neuropsychological conceptualization and brain-behavior-condition/(diagnosis) issues
 - Justification of recommendations provided
 - How contextual factors may impact presentations, interpretations, and conclusions
 - Psychosocial circumstances
 - Context or setting of the evaluation



Practice Samples Defense

- The examiners will also use cases as a springboard for broader discussion:
 - How diversity issues may impact presentations, interpretations, and conclusions
 - Ethical and Legal standards
 - How cases relate examinee's professional practice
 - Practice systems



ABCN: Preparing for the ABPP Board Certification Examination in Clinical Neuropsychology Part 2: Practice Sample Submission and Defense

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ORAL EXAMS

Once your practice sample is accepted, you will be noticed and can initiate the process of scheduling the oral exam date.

Oral examination is the final step of ABPP certification in Clinical Neuropsychology

Examiners present candidates with situations in which they are asked to demonstrate the application of their professional experience, knowledge and skills.

Gives examiners the opportunity to evaluate the breadth and depth of candidates' professional knowledge and practice.

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ORAL EXAMS WHAT IS THE EXAM TEAM EVALUATING?

Evaluate how you think about, evaluate and manage neuropsychological problems commonly seen in practice.

- Reasoning
- Knowledge of science / research related to neuropsychology
- Justification for conclusions
- Appropriateness of treatment plans.

3

ORAL EXAMS

3 SECTIONS

Practice Sample Ethics and Professional Commitment Fact Finding

• Order of the exams is set in advance and your examiners will take you to the exam room and start with brief instructions.

• All examiners will be assessing your knowledge in the required areas of competency.

• Examiners are collegial and try to make the experience interesting and rewarding for you, while assessing your knowledge / reasoning.

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ORAL EXAMS

THINGS YOU SHOULD KNOW

• Confidentiality: You will be asked to sign a Statement of Confidentiality agreement, affirming that you will not discuss specifics of the exam with others at any time and that you will not reveal the identity of any other candidates present for the exam.

• Exam Team:

- 1 examiner for Ethics and Professional Commitment
- 1 examiner for Practice Sample
- 1 examiner for Fact Finding

• You may (or may not) have an additional person

- 1 observer (senior ABCN specialist who served as an examiner)
- or
- 1 trainee (ABCN specialist learning to become an examiner)

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ORAL EXAMS

THINGS YOU SHOULD KNOW

• Observers and trainees do not participate in the exam or deliberations but may be called upon to clarify facts

• Each exam lasts 45-55 minutes

• Candidates may bring pen / paper to the exam

• All notes taken during the exam must be given to the examiner at the end of the exam.

• No materials may be brought to the FF / Ethics exams

• Candidate can bring a copy of the Practice Samples to that exam, as originally submitted for the review. Samples cannot have notes or added markings on the samples.

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Competencies

- Functional
 - Assessment
 - Intervention
 - Consultation
- Foundational
 - Scientific knowledge and methods
 - Evidence based practice
 - Individual and cultural diversity
 - Ethical legal standards and policy
 - Professionalism
 - Relationships
 - Interdisciplinary systems
 - Reflective Practice/Self-Assessment/Self-Care.

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Assessment

- Candidates should be well versed in the application of appropriate evaluative methods for different patient populations and problems in a variety of contexts.
- They should be knowledgeable about test construction, standardization, validation, or related psychometric issues as applied to clinical neuropsychological assessment techniques.
- Assessment practices, profile interpretation, communication of results, and use of assessment results are evaluated in the examination process.
- As well, the candidate is evaluated on the ability to understand and appropriately address individual and cultural diversity factors, ethical issues, and legal issues as they relate to assessment choices, interpretation of results, intervention, and outcome evaluation.

8

Intervention

- Candidates must demonstrate knowledge of potential treatments and interventions to address the cognitive and behavioral problems observed on neuropsychological assessment.
- Knowledge of evidence based intervention methods and a rationale appropriate to address deficits in cognition
- In some forms of professional practice, assessment and intervention are integral parts of the same process. In other clinical circumstances, specific recommendations for managing the problem are made through referrals to other appropriate professionals.
- Candidates should be able to demonstrate informed decision making regarding choice of therapeutic or environmental interventions to address cognitive, behavioral, or psychosocial deficits in the context of considerations regarding individual diversity and life circumstances.

9

Consultation

- Candidates must demonstrate the ability to communicate and apply knowledge in consultation with others such as health care professionals from other disciplines, educational personnel, social service agencies, nursing homes, rehabilitation staff, industry, legal systems, public policy makers, and individuals in other institutions and settings.
- They must be skilled at clarifying the referral question and effectively communicating results to referring/treating providers and patients both verbally and in writing.
- Candidates who are professionally involved in non-evaluative settings such as clinical research or as policy consultants should demonstrate effective collaboration and integration of neuropsychological science and practice as appropriate.

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Scientific Knowledge & Methods

- Candidates must be knowledgeable about the research basis of clinical neuropsychological practice as defined by the core knowledge base domains described in the Houston Conference guidelines for education and training in neuropsychology.
- These include research methodology in clinical populations, neurodevelopment, psychopathology, functional neuroanatomy, clinical syndromes, and specialized neuropsychological assessment techniques.
- Candidates must be knowledgeable of the history of clinical neuropsychology and demonstrate familiarity with recent scientific and scholarly developments in clinical neuropsychology. They must also be able to demonstrate the ability to apply this knowledge appropriately in clinical practice.

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Evidence Based Practice

- The clinical neuropsychologist must be knowledgeable of the recent literature on normal and abnormal brain development and function, assessment methods, and intervention strategies and must be able to apply this knowledge according to evidence-based practice concepts.

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Individual and Cultural Diversity

- Awareness of all aspects of individual and cultural diversity and how these issues inform assessment, consultation, intervention, and scientific knowledge must be demonstrated.
- Candidates must recognize the impact of cultural, linguistic, socio-environmental, and other areas of diversity as they pertain to cognitive development and brain function/dysfunction.
- They must also be aware of their own individual and cultural characteristics as they influence functioning across competency domains and interpersonal interactions.

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Ethical Legal Standards & Policy

A successful candidate is aware of:

- Current APA/CPA ethical principles and practice standards
- Current statutory and regulatory provisions applicable to professional practice
- The implications of these principles to protect patients, society, and the profession
- How to recognize and avoid adverse ethical and legal circumstances and address them appropriately.

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Professionalism

- Clinical neuropsychologists must understand their role in different contexts and systems relevant to clinical populations served.
- They must remain current in knowledge and skills of brain-behavior assessment and, whenever appropriate, contribute to advancements in the field.
- They should strive to continuously improve their practice and comport themselves in a professional manner and retain a professional demeanor at all times, including in all verbal, nonverbal, and written communications.
- Candidates should recognize their professional accountability and be amenable to external review.

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Relationships

- Candidates must demonstrate the ability to interact effectively with patients, caregivers, and other providers.
- They must be able to establish effective working relationships across systems of care and communicate effectively with others about brain behavior relationships.
- They should demonstrate knowledge of and sensitivity to issues regarding the welfare, rights, and dignity of others, and they must be aware of their own impact on others.

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Interdisciplinary Systems

- Candidates must demonstrate knowledge of key issues and concepts in related disciplines (e.g., neurology, psychiatry, neuroradiology, rehabilitation, education) and the ability to communicate and interact knowledgeably with professionals across these disciplines.
- Candidates should be able to articulate the roles of other professionals with regard to patient care, integrate the perspectives of related disciplines into their case conceptualizations, display the ability to work as a member of interdisciplinary teams, and collaborate with other professionals to contribute neuropsychological information to overall team diagnostic formulation, planning, and intervention.

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Reflective Practice/Self-Assessment/Self-Care

- Candidates must demonstrate personal and professional self-awareness and the ability to monitor and evaluate their own professional performance.
- Processes for ongoing analysis of their skill set and knowledge base should be articulated.
- They must recognize the limits of their own competence and seek consultation and/or additional training as warranted to meet the needs of their patients.

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Competencies (again)

- Again, each examiner on your team will be using these competencies to guide their questions, since these are the standards for obtaining board certification.

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Practice Sample Exam

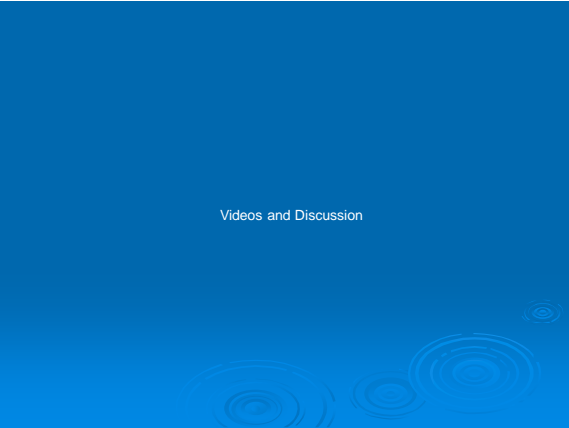
- A minimum of three ABCN Specialists have read and evaluated the candidate's Practice Sample; at least two of these reviewers judged the Practice Sample acceptable for defense at the orals.
- Each reviewer provided comments about the work and suggested questions for use during the examination.
- The examiner uses this information, along with his/her own impressions and questions, to develop and conduct the Practice Sample exercise.

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Practice Sample Exam

- The examiner will discuss both cases during the course of the examination, although it is not required that an equal amount of time be spent on each case.
- The examiner may question the candidate about specific aspects of the cases or challenge the candidate to explain and defend their work based on current professional standards, scientific knowledge, or research findings.
- The Practice Sample is also used as a point of departure to query the candidate about related psychometric, diagnostic, scientific, or practice-related neuropsychological issues.

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