

A PRIMER ON NEUROPSYCHOLOGICAL TESTING FOR ELDER LAW ATTORNEYS

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To most legal practitioners, neuropsychological testing is seen as either fascinating or complicated, but in both cases, their underlying concern is: what am I going to do with the report? Much like any expert, neuropsychologists work with ideas that are not immediately familiar to most legal professionals. This Article endeavors to familiarize legal practitioners with the objective, validated, peer-reviewed, and consistently administered nature of neuropsychological evaluations. By creating a greater understanding of neuropsychological evaluations, this introduction will serve all involved by helping attorneys better present or discredit this highly probative type of evidence and bring greater clarity to the beautifully complex but often murky subject of how the human brain works.

I. Introduction

Attorneys are adept at explaining complex legal concepts to their clients, so it becomes noticeable when their client consistently misunderstands the matter at hand. The attorney's subjective sense that some-

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thing is odd about their client, whether a new client or a long-time client, is a tremendously valuable sign. In this manner, attorneys are often the first to become aware that their client has diminished capacity.¹ So, what should be done with a hunch that your client's ability to participate meaningfully in their case may be limited? These are instances where neuropsychological assessment can offer an objective assessment of your client's competence.

When attorneys have a client who may have diminished competency, they face challenges that are further complicated by the ethics standards adopted by most states—which are laid out in the 2002 revision of the American Bar Association's Model Rules of Professional Conduct.² Specifically, Rule 1.14 may obligate an attorney to act in a manner inconsistent with their client's current wishes if that attorney has reason to believe their client lacks competence.³ This places attorneys in the unenviable position of either alienating or risking harm to clients who cannot act in their own best interest. In circumstances such as these, an attorney's first step would be to reach out to either a clinician currently treating their client or to have an initial phone consultation with a controlled expert such as a neuropsychologist or physician.⁴

While retaining a neuropsychologist to assess a client's competency is likely to assist the trier of fact, legal practitioners still face the looming question: what am I going to do with the report? Or rather, how am I going to understand the report I get? In the service of answering this, this Article is intended to foster a greater understanding of the areas, or domains, assessed in neuropsychological reports. This Article also endeavors to increase familiarity with neuropsychological terminology, should the practitioner opt to engage a neuropsychologist or be confronted with an existing neuropsychological evaluation. Specific topics addressed include:

- how neuropsychological testing works,

1. See Charles P. Sabatino, *Representing a Client with Diminished Capacity: How Do You Know It and What Do You Do About It?*, 16 J. AM. ACAD. MATRIM. LAW'S. 481, 482–83 (2000).

2. MODEL RULES OF PROF'L CONDUCT (AM. BAR ASS'N 2013).

3. MODEL RULES OF PROF'L CONDUCT R. 1.14 (AM. BAR ASS'N 2013).

4. See generally Candice A. Garcia-Rodrigo, *Tips for Representing a Client with Diminished Capacity*, AM. BAR ASS'N (Jan. 29, 2016), <https://www.americanbar.org/groups/litigation/committees/solo-small-firm/practice/2016/tips-representing-client-diminished-capacity/> (explaining that an attorney is permitted to "seek the appointment of a guardian ad litem, conservator or guardian" to maintain the "normal client-lawyer relationship" when the client's capacity is diminished).

- the relationship between the objective, peer-reviewed nature of neuropsychological testing and admissibility standards,
- clinical neuropsychological evaluations vs. forensic neuropsychological evaluations,
- brief descriptions of diagnoses commonly associated with diminished capacity, and
- an introduction to common neuropsychological terminology.

II. What Does a Neuropsychologist Do?

Neuropsychology is the science of measuring the capabilities of a person's brain.⁵ These mental capabilities, also referred to as cognitive abilities, include: "attention, perception, thinking, learning and memory."⁶ In order to measure cognitive performance, neuropsychological testing utilizes memory tests, specialized puzzles, and real-world assessments to see how the examinee performs in different areas of functioning. These areas are referred to as cognitive domains. The various cognitive domains that neuropsychologists assess will be outlined in the Section titled "Domains Neuropsychologists Assess." For example, some tests might require the examinee to recall a story they have been read, to solve a puzzle that requires them to plan and organize, or to engage in simulations of real-life tasks. These comparison samples are heavily researched and are referred to as normative databases.

By comparing an individual's performance to these normative standards, objective conclusions can be drawn about the examinee's real-world strengths and weaknesses.⁷ The ability to directly test individual components of thinking or cognition in a systematic and unbiased manner is what renders neuropsychological evidence particularly

5. See generally Dept. of Neurology, Neuropsychological Evaluation FAQ, UNC SCH. MED., <https://www.med.unc.edu/neurology/divisions/movement-disorders/npsycheval/> (last visited Sept. 28, 2020) [hereinafter Neuropsychological Evaluation FAQ] ("Neuropsychology is concerned with relationships between the brain and behavior. Neuropsychologists conduct evaluations to characterize behavioral and cognitive changes resulting from central nervous system disease or injury...").

6. Capabilities, INS DICTIONARY OF NEUROPSYCHOLOGY AND CLINICAL NEUROSCIENCES (David Loring ed., Oxford University Press 1999).

7. See generally Molly E. Zimmerman, Encyclopedia of Clinical Neuropsychology (explaining that large samples are used that take into account demographic information to achieve a result that is representative of a given population).

probative.⁸ Instead of opining on the basis of pure clinical judgment, neuropsychologists can draw conclusions based on objective, valid, and reliable test results.⁹ The manner in which neuropsychological testing meets admissibility standards will be addressed in the Section titled “Admissibility.”

III. What is a Neuropsychologist?

Neuropsychologists all have doctoral degrees (i.e., Psy.D., Ph.D., EdD.) and are licensed as clinical psychologists.¹⁰ What differentiates neuropsychologists is that during and after their doctoral programs, they complete additional coursework and postdoctoral training in the physiological and behavioral aspects of brain diseases.¹¹ The most widely accepted training guidelines for neuropsychologists come from the “Houston Conference Guidelines,”¹² which outline expectations for the training and experience necessary to be considered a neuropsychologist.

Additionally, there are guidelines for clinicians who choose to work in forensic settings.¹³ These guidelines include classroom education, supervised training, and ongoing professional development.¹⁴ For those working within forensic settings, the American Board of Professional Psychology publishes their “Specialty Guidelines for Forensic

8. *See id.*

9. *See id.*

10. *See generally* Brian L. Brooks et al., *Developments in neuropsychological assessment: Refining psychometric and clinical interpretive methods*, 50 CANADIAN PSYCHOL. 196 (2009) (providing educational requirements).

11. *See* Neuropsychology Programs and Careers, ALL PSYCHOL. SCH'S, <https://www.allpsychologyschools.com/clinical-psychology/career-in-neuropsychology/> (last visited Sept. 28, 2020) (“Two years of supervised training in clinical neuropsychology and two to three years of experience in the chosen specialty . . . are required before you’ll be eligible to take the required Examination for the Professional Practice in Psychology.”).

12. H.J. Hannay et al., *Proceedings of the Houston Conference on Specialty Education and Training in Clinical Neuropsychology*, NAT’L ACAD. NEUROPSYCHOLOGY, <https://www.nonline.org/nan/Files/PAIC/PDFs/houstonconf.pdf> (last visited Sept. 28, 2020).

13. *See* How to Become a Forensic Psychologist, PSYCHOLOGY.ORG, <https://www.psychology.org/careers/forensic-psychologist/> (last visited Sept. 28, 2020) (explaining that requirements for forensic psychologists vary based on state licensing requirements).

14. *See id.*

Psychology,"¹⁵ which are foundational guidelines of expected training and experience for forensic psychology specialists. Both psychologists and neuropsychologists use these guidelines as a starting point from which to build competence in managing the complexities created by the interface of psychology and the law.

IV. Capacity vs. Competence

The terms capacity and competence are often used interchangeably despite being distinct constructs.¹⁶ As legal practitioners are well-aware, incompetence is a legal term of art denoting a finding of fact that an individual cannot perform a given transaction.¹⁷ Competence often ends up being an either/or determination, i.e., either the individual retains testamentary capacity, or they do not.¹⁸ Because of the complexities of assessing individual areas of competence when opining solely on the basis of clinical judgment, findings of incompetence often broadly presume an individual is incompetent in all areas, even if they only experience a clear impairment in one area.¹⁹ While there has been some movement within recent years toward recognizing the gray areas of human functioning, courts understandably remain cautious about fact-based determinations that could also fall into a gray area.²⁰ The possible

15. AM. BD. PROF'L PSYCHOLOGY, Specialty Specific Requirements, <https://www.abpp.org/Applicant-Information/Specialty-Boards/Forensic-Psychology/Application-Specialty-Specific-Fees.aspx> (last visited Sept. 28, 2020).

16. See Barton W. Palmer & Alexandra L. Harmell, *Assessment of Healthcare Decision-making Capacity*, 31 CLINICAL NEUROPSYCHOLOGY 530, 532 (2016) ("The outcome of a clinical assessment of a patient's decisional capacity is not synonymous with a determination of a patient's legal competence status. The latter is a decision made by the court, not the clinician.").

17. See *id.*

18. See generally Criminal Resource Manual § 63 Standards For Determining Competency And For Conducting A Hearing, U.S. DEP'T. JUST., <https://www.justice.gov/archives/jm/criminal-resource-manual-63-standards-determining-competency-and-conducting-hearing> (last visited Sept. 28, 2020).

19. See Phillip J. Resnick, M.D. & Renee Sorrentino, M.D., *Competence vs. capacity: an analysis for medical professionals*, L. PROFESSOR BLOGS NETWORK (Jan. 12, 2006), https://lawprofessors.typepad.com/elder_law/2006/01/competence_vs_c.html [hereinafter *Competence vs. capacity*] ("[C]ompetence . . . is issue specific. Some physicians who misconstrue competence to be a global, black or white issue will ask psychiatric consultants for a broad consultation on whether the patient is competent or not. The response of the psychiatric consultant should be, 'Competent for what?'").

20. See AM. BAR ASS'N & AM. PSYCHOLOGY ASS'N, *Assessment of Older Adults with Diminished Capacity: A Handbook for Psychologists* 1, 8 (2008), <https://>

inclusion of individuals with inconsistent or partial competence in decision-making processes is an important area of study. Yet, the topic of supported decision-making²¹ falls beyond the scope of this Article and its intent to describe the basics of neuropsychological evaluation.

Distinct from the legal construct of competence, neuropsychologists and the general medical community view an individual's abilities through the construct of capacity.²² Capacity can be thought of as being comprised of the multiple sub-abilities (i.e., domains) needed to satisfy each legal competency standard.²³ Further, each of these domains is assessed as existing on a continuum as opposed to being black and white.²⁴ The fine distinctions that assessing multiple abilities on a continuum provide also overlaps with the legal construct of competence. Assessing a broad range of domains that relate to thinking abilities, however, allows neuropsychologists to meaningfully opine on the relevant standards across a variety of jurisdictions. Beyond allowing neuropsychologists to give objective evidence of why individuals may lack the ability to meet a legal standard, the flexible nature of neuropsychological testing enables the evaluator to address the court's ancillary questions with objective evidence. These questions may include the level of care the individual needs, treatment approaches that may result in regaining competence, or recommendations on managing the examinee's problematic behaviors.

While this approach to testing allows neuropsychologists to weigh in on several different matters, the main strength of testing involves its objective nature. Instead of rendering an opinion solely based

www.apa.org/pi/aging/programs/assessment/capacity-psychologist-handbook.pdf ("Clinical and legal professionals are increasingly turning to psychologists for opinions regarding the decision-making capacity of older adults."); Incompetence, CORNELL L. SCH., <https://www.law.cornell.edu/wex/incompetence> (last visited Oct. 13, 2020) (discussing the definition of incompetence and how courts use it.).

21. NAT'L RES. CTR. FOR SUPPORTED DECISION-MAKING, *Education*, <http://www.supporteddecisionmaking.org/education> (last visited Nov. 21, 2020).

22. See generally *Competence vs. capacity*, *supra* note 19 (explaining that competence is issue specific and capacity is one's ability to make an informed decision regarding that issue).

23. See Philip D. Harvey, *Domains of Cognition and Their Assessment*, 21 *DIALOGUES IN CLINICAL NEUROSCIENCE* 227 (2019), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6829170/pdf/DialoguesClinNeurosci-21-227.pdf>.

24. See Hiroko H. Dodge et al., *Cognitive Domains and Trajectories of Functional Independence in Nondemented Elderly Persons*, 61 *J. GERONTOLOGY: SERIES A* 1330 (2006), <https://academic.oup.com/biomedgerontology/article/61/12/1330/537574> [hereinafter Dodge].

on their subjective clinical judgment, neuropsychologists' opinions incorporate objective, unbiased data.²⁵ Matters related to the admissibility of neuropsychological evidence will be addressed in the Section on admissibility. Descriptions of the specific domains assessed are included in "Domains Neuropsychologists Assess." An example of the specific domains of functioning needed to satisfy a given legal standard is included in the Section titled "Bridging the Gap Between Competence and Capacity."

A. The Science of Cognitive Functioning

Research into brain functioning suggests that all human abilities lie on a continuum.²⁶ In terms more applicable to the legal profession, competency-related skills are gray to a greater or lesser extent.²⁷ Patterns of cognitive strength and weakness are part of the human condition, however, the extent of these strengths and weaknesses can grow when cognitive abilities decline.²⁸ Moreover, individuals with significant weaknesses in one cognitive domain may still have strong or intact abilities in other areas.²⁹ For example, an individual who cannot remember to pay their monthly bills may be able to express well-reasoned wishes to their financial advisor.

Another common gray area emerges when an individual has different abilities at different times. This variability can be particularly challenging for the courts to manage because of the large burden placed on an individual deemed incompetent, who later seeks to challenge this determination. For instance, this fluctuating level of competence is seen among individuals with dementia. While having a dementia diagnosis always denotes some level of cognitive decline, not all individuals with

25. See, e.g., *id.*

26. See, e.g., *id.* at 1331 ("Because we know that functional disability is the most powerful predictor of mortality besides age . . . we conceptualized [functional] disability as being on a continuum that ends with death.").

27. See *id.*

28. See generally SHARPBRAINS, What are cognitive abilities and skills, and can we boost them?, <https://sharpbrains.com/what-are-cognitive-abilities/> (last visited Sept. 28, 2020).

29. See Alice Medalia & Nadine Revheim, *Dealing with Cognitive Dysfunction Associated with Psychiatric Disabilities*, N.Y. STATE OFFICE OF MENTAL HEALTH, https://omh.ny.gov/omhweb/cogdys_manual/cogdyshndbk.htm (last visited Sept. 28, 2020) ("We are born with certain cognitive capabilities - we may be better at some skills than others, but we can improve the weaker skills.").

dementia are incompetent. Some otherwise competent demented individuals, however, may become so agitated or confused in the afternoon or evening that they clearly lack competence. Yet this same individual may resume competence the next morning. Clinically, this phenomenon is referred to as sundowning and can confound the practitioner's and the clinician's subjective ability to judge their client's level of competency.³⁰

Other challenging situations emerge when an individual is experiencing an acute psychotic episode. Acuity refers to a disorder with rapid onset in the same way an asthma attack is considered to have an acute onset.³¹ Psychosis refers to symptoms of hallucinations, such as hearing or seeing things that are not there, or profoundly illogical beliefs called delusions.³² The nature of psychosis is that the individual is so convinced of the hallucinated voices of others talking to them, or their belief that little people are living inside their apartment walls, that these beliefs remain unchanged or fixed despite ample evidence to the contrary.³³

One relevant consideration when working with psychotic individuals relates to the stresses of being involved in legal proceedings. Legal determinations of competence are, by their nature, adversarial, which impacts individuals experiencing persecutory delusions (i.e., that someone is "out to get them") differently.³⁴ When an individual suffering from psychosis encounters people in positions of authority who threaten to curtail their freedoms, these realities can be grossly misinterpreted and amplify their delusional belief system. For instance, it is not uncommon for these individuals to believe the judge is being paid off by their estranged brother as part of a larger conspiracy, or that their attorney is attempting to kill them using television waves. These symptoms are commonly seen in diagnoses such as schizophrenia or

30. See, e.g., Dodge, *supra* note 24.

31. Amy Jo Marciano-Reik, Acute Diseases, *ENCYCLOPEDIA OF BEHAVIORAL MEDICINE* (Marc D. Gellman & J. Rick Turner, eds., 2013).

32. See generally David B. Arciniegas, *Psychosis*, 3 *BEHAV. NEUROLOGY & NEUROPSYCHIATRY* 715, 718 (2015), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4455840/> (explaining the different effects of psychosis including hallucinations and delusions).

33. See *id.* at 716 ("Delusions (i.e., fixed false beliefs), by definition, are evidence of impaired reality testing: delusional beliefs are ones maintained steadfastly even in the face of evidence contradicting them incontrovertibly.").

34. *THE DIAGNOSTIC AND STATISTICAL MANUAL OF MENTAL DISORDERS*, persecutory delusions (AM. PSYCHIATRIC ASS'N, 5TH ED.).

bipolar disorder but are also seen in more advanced cases of dementia. Notably, psychotic individuals may suffer gross, global impairment, and disorganized or confused thinking. Although, with appropriate medications and supportive therapy, they may completely regain their competence,³⁵ and recognize the unreality of matters they previously insisted on. At this time, they can resume meaningful participation in the legal process.

V. Clinical Neuropsychological Evaluation vs. Forensic Neuropsychological Evaluation

A. Clinical Neuropsychological Evaluations

The vast majority of neuropsychological evaluations performed are clinical in nature, meaning that they are written for other medical professionals and are intended to clarify a diagnosis or provide treatment recommendations—not to answer questions posed by the court.³⁶ A referral for a clinical evaluation might be made when a primary care physician, psychiatrist, or neurologist seeks a second opinion on a patient they find perplexing.³⁷ Clinical neuropsychological evaluations endeavor to integrate multiple sources of data, medical history, and patient reports in order to draw treatment-centric conclusions.³⁸ Because clinical evaluations directly inform and guide medical intervention,

35. See generally Colin Fernandez et al., *The Recovery of Factors Associated with Decision-Making Capacity in Individuals with Psychosis*, 3 BJPSYCH OPEN 113, 116 (2017), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5415675/pdf/bjporcpsych004226.pdf> (finding patients lacking capacity showed improvements after twelve weeks).

36. See FORENSIC PANEL, *Neuropsych & Psych Testing: Criminal Law*, https://www.forensicpanel.com/expert_services/neuropsychology/criminal_law/competency.html (last visited Sept. 28, 2020) (“Neuropsychological testing yields information about specific cognitive domains, but does not substitute for a thorough assessment of task-specific abilities related to legal competence.”).

37. See generally Zimmerman, *supra* note 7 (explaining that large samples are used that take into account demographic information to achieve a result that is representative of a given population).

38. See *Neuropsychological Evaluation FAQ*, *supra* note 5 (explaining that an individual’s test scores “are interpreted by comparing their score to that of healthy individuals of a similar demographic background . . .”).

commercial health insurance and Medicare generally consider neuropsychological testing to be medically necessary.³⁹ It is, therefore, a procedure they will reimburse.⁴⁰ Typically in a clinical evaluation, clinical neuropsychologists will only address medicolegal matters peripherally—if they do at all.⁴¹ Billing to answer questions that are not medically necessary could be considered insurance fraud.⁴² As a result, few neuropsychologists are willing to bill these assessments to an insurer when answering legal questions.⁴³

When a neuropsychologist does directly assess medicolegal constructs in a clinical evaluation, attorneys are often faced with a report that is challenging to interpret. These reports will often address issues central to the legal process in vague or, at times, contradictory ways.⁴⁴ Conclusions about competency and capacity may not follow logically from the data collected because of a lack of familiarity with the relevant legal standards.⁴⁵ Additionally, when a neuropsychologist is unaware of the broader legal context their patient finds themselves in, they have no reason to administer tests that specifically assess competencies.⁴⁶ Further, a neuropsychologist is more likely to be swayed by the carefully chosen information provided by their patient or patient's family.⁴⁷ Lastly, neuropsychologists, who primarily conduct clinical evaluations,

39. See, e.g., BLUE CROSS MA, *Neuropsychological and Psychological Testing*, 1 (2019), https://www.bluecrossma.com/common/en_US/medical_policies/151%20Neuropsychological%20and%20Psychological%20Testing%20prn.pdf.

40. *Id.*

41. See generally *Ethics Committee*, *Medicolegal Ethics Guidelines*, WORLD MED. ASS'N, (Mar. 2013), <https://cdn.ymaws.com/www.csme.org/resource/resmgr/imported/Guidelines%20for%20Medicolegal%20EthicsFinal%20apr5.pdf>.

42. See generally *Medical Learning Network*, *Medicare Fraud & Abuse: Prevent, Detect, Report*, CMS 1, 5 (Feb. 2019) <https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/Downloads/Fraud-Abuse-MLN4649244-Print-Friendly.pdf>.

43. See Paula E. Hartman-Stein, *Health Care Fraud Grabs Headlines; Psychologists More Often Troubled by Poor Documentation*, NAT'L PSYCHOLOGIST (Nov. 6, 2016), <https://nationalpsychologist.com/2016/11/health-care-fraud-grabs-headlines-psychologists-more-often-troubled-by-poor-documentation/103491.html>.

44. See Steven M. Essig et al., *Practices in Forensic Neuropsychology: Perspectives of Neuropsychologists and Trial Attorneys*, 16 ARCHIVES OF CLINICAL NEUROPSYCHOLOGY 271, 286 (2001).

45. See e.g., *id.*

46. See Daniel C. Marson et al., *Testamentary Capacity and Undue Influence in the Elderly: A Jurisprudential Therapy Perspective*, 28 L. & PSYCHOL. REV. 71, 94–95 (2004).

47. *Id.* at 91.

may lack experience with the forensic application of neuropsychological testing.⁴⁸

B. How is a Forensic Neuropsychological Evaluation Different?

The process of assessing individuals involved in legal proceedings is considerably more complex and time consuming than evaluating a typical clinical case. In part, this is because insurers often severely limit the amount of time clinical providers can bill to assess a patient. But none of this should be taken as suggesting clinical neuropsychological evaluations are inferior to forensic neuropsychological evaluations. Instead, this is a situation of apples versus oranges where it would be unreasonable to expect an evaluation intended to provide diagnosis and clinical treatment recommendations to also address legal complexities.⁴⁹ Indeed, having one or more historical clinical neuropsychological evaluations can be tremendously useful to the forensic evaluator (not to mention the individual's treatment providers) in assessing longstanding difficulties or the trajectory of cognitive decline over time.⁵⁰

Moreover, forensic evaluations assess two additional areas: one class of instruments assesses the validity (i.e., honesty or level of effort) an examinee provides; and the other class of instruments is referred to as civil capacity instruments, which confront examinees with real-world scenarios involving legal decision-making in order to directly assess their ability.

Furthermore, areas of increased complexity that are specific to forensic evaluations include the interview, collateral interviews, and the attorney consultation and records review.

The patient interview in a forensic neuropsychological assessment addresses all of the same topics covered in a clinical interview.⁵¹ Still, significant additional time is spent probing subjects related to the examinee's understanding of the case at hand and the decisions they need

48. Shane S. Bush, *Independent and court-ordered forensic neuropsychological examinations: Official statement of the National Academy of Neuropsychology*, 20 ARCHIVES CLINICAL NEUROPSYCHOLOGY 997, 999 (2003) <https://academic.oup.com/acn/article/20/8/997/2826>.

49. Marson et al., *supra* note 46, at 85.

50. *Id.*

51. Bush, *supra* note 48, at 999.

to make.⁵² In forensic interviews, an additional focus is placed on identifying inconsistencies, withheld information, and distortions in what the examinee reports.⁵³ Part of the forensic interviewer's ability to identify these distortions stems from a review of records, as well as from collateral interviews as discussed in the following Section.

Comprehensive interviews of collateral sources of information (e.g., family, caregivers, treating clinicians, etc.) need to be conducted to glean information about various topics that may be intentionally distorted, or simply misperceived by the examinee. These include external perspectives on the examinee. Someone who lacks competence cannot be expected to competently report their ability to manage their financial affairs, memory, ability to take care of their home, and how consistently they take their medications. In circumstances where the overall stakes are high and misperceptions are likely, these areas must be carefully assessed.⁵⁴ An outsider's perspective on the examinee's true functioning, however, becomes much more critical—especially when the examinee may be motivated by secondary gains.⁵⁵

During high-stakes legal battles, examinees may underreport their challenges (i.e., secondary gain of being seen as competent may result in embellishing upon one's abilities to manage one's household). Further, individuals who suffer from cognitive decline may be poor informants in that they lack insight into their decline. Essentially, asking an individual who has poor memory to recall recent instances of forgetfulness is unlikely to provide any useful information. Clinically, this lack of insight into one's own deficits is referred to as anosognosia.⁵⁶

In order for a neuropsychologist to assess an individual's ability to perform a particular function, consultation with the attorney and review of select legal documents is necessary. Prior to evaluating, the examiner needs to have a basic understanding of the facts of the case, the issues to be addressed, and the legal determinations that ultimately

52. *Id.*

53. See Caroline Logan, *Forensic Clinical Interviewing: Toward Best Practice*, 17 *INT'L J. OF FORENSIC MENTAL HEALTH* 297 (2018).

54. See e.g. Eric G. Mart, *Neuropsychological Assessment of Testamentary Capacity and Undue Influence*, 31 *ARCHIVES CLINICAL NEUROPSYCHOLOGY* 554, 561 (2016).

55. *Id.*

56. Naomi S. de Ruijter et al., *Anosognosia in dementia: A review of current assessment instruments*, 12 *ALZHEIMER'S & DEMENTIA: DIAGNOSIS, ASSESSMENT & DISEASE MONITORING* 1 (2020), <https://alz-journals.onlinelibrary.wiley.com/doi/full/10.1002/dad2.12079>.

need to be made.⁵⁷ As discussed earlier, it is also important for the examiner to have access to medical records in order to check for consistencies among patient reports. Medical records also provide an opportunity to track patterns in past functioning abilities, and to compare other professionals' viewpoints on the examinee's symptoms over time. There are also frequent instances where past clinicians document otherwise minor observations that take on greater importance over time. Last, reviewing lab results and brain imaging are an important part of determining the ultimate diagnosis. Clinical neuropsychologists review the same types of records with varying degrees of scrutiny. While forensic neuropsychologists are not expected to draw conclusions with any greater certainty than a clinical neuropsychologist, the reality is that forensic clinicians often spend more time reviewing records. Essentially, the risks of missing something—that either results in an incorrect conclusion or creates the appearance of examiner incompetence during testimony—are that much greater.

C. Consent in a Clinical Neuropsychological Evaluation

In a typical clinical neuropsychological evaluation, the neuropsychologist (i.e., the treater) starts by providing the patient with sufficient information to understand the risks and benefits of the proposed procedure, i.e., neuropsychological testing.⁵⁸ With this information, the patient is empowered to provide informed consent to evaluation or treatment if they so choose.⁵⁹ Elements of informed consent for a clinical evaluation include:

- the reason testing was requested;
- an overview of what testing consists of;
- the outcomes of testing that could benefit the patient;
- the expected risks (if any) associated with testing;
- confidentiality protections as outlined by The Health Insurance Portability and Accountability Act of 2004;⁶⁰ and

57. Robert B. Boyers, *The Lawyer and The Neuropsychologist: Managing the Process and Each Other*, BOYERS L. 1, 10, https://www.boyerslaw.com/wp-content/uploads/2018/12/final_iba_sp_neuropsych.pdf (last visited Sep. 27, 2020).

58. Informed Consent in Clinical Neuropsychology Practice, NAT'L ACAD. NEUROPSYCHOLOGY 1, 3 (Oct. 14, 2003), <https://www.nanonline.org/docs/PAIC/PDFs/NANinformedconsent.pdf> [hereinafter Informed Consent].

59. *Id.*

60. Health Insurance Portability and Accountability Act, Pub. L. No. 104-91, 110 Stat. 1936 (1996).

- alternate options (if any) to neuropsychological testing.⁶¹

Once the patient is given this information and the opportunity to ask any clarifying questions, if they demonstrate sufficient understanding of these elements, the patient can provide informed consent to proceed.⁶² Additionally, in clinical evaluations, it is commonplace for the patient to be provided a copy of the final report and to schedule a face-to-face feedback session with their provider.⁶³ In this feedback session, the conclusions of the evaluation and the rationale for recommended treatments are explained.⁶⁴ Stated more simply, the overarching focus of the clinical evaluation is the betterment of the patient's circumstances and the coordination of treatment.⁶⁵ When a patient can benefit from an explanation of their diagnosis or treatment results, they or their loved ones would generally be provided a feedback session.

D. Consent and Assent in Forensic Evaluations

When competence is being assessed, the examiner remains obligated to orient the examinee to the process.⁶⁶ But this is the point at which forensic evaluations depart from what is seen in clinical evaluations. Additionally, because the central question being addressed often involves capacity, the examinee may be unable to meaningfully provide consent because of limited cognitive abilities. In these situations, their agreement to proceed is referred to as assent.⁶⁷ During these preparations, the examiner generally reminds the examinee that they cannot be compelled to participate by the examiner.⁶⁸ The caveat is generally provided that the examinee may want to discuss their choice not to engage meaningfully and openly in the evaluation with their attorney to avoid complicating their case.⁶⁹ Last, in circumstances when the examinee is court ordered to submit to evaluation and is unable to meaningfully assent, the examiner is expected to protect the rights of their examinee

61. Informed Consent, *supra* note 58, at 3.

62. *Id.*

63. See Carlton S. Gass & M.C. Brown, *Neuropsychological Test Feedback to Patients With Brain Dysfunction*, 4 PSYCHOL. ASSESSMENT 272, 274 (1992).

64. *Id.* at 272.

65. *Id.* at 272–73.

66. Informed Consent, *supra* note 58, at 2.

67. AM. PSYCHOL. ASS'N, Specialty Guidelines for Forensic Psychology, AM. PSYCHOL., (Jan. 2013), <https://www.apa.org/pubs/journals/features/forensic-psychology.pdf>.

68. See *id.*

69. *Id.*

by, for example, notifying the examinee's attorney and postponing the evaluation.

One exception that is particularly relevant to elder law attorneys is that psychologists are not required to obtain assent or consent when evaluating competence. Under the American Psychological Association's Ethical Principles of Psychologists and Code of Conduct,⁷⁰ neuropsychologists may, but depending on state law are not explicitly required to, disclose that the evaluation is being performed to assess that individual's competence.⁷¹ Still, this point is often moot because it is readily apparent to the examinee why they are seeing a neuropsychologist.⁷²

Regardless of whether the examinee's attorney refers their client for evaluation or the court orders the examinee to submit to an evaluation, the non-clinical nature of a forensic neuropsychological examination does not fall under the auspices of HIPAA.⁷³ Instead, either the attorney or the court decides who shall have access to the report.⁷⁴ Moreover, it would be rare for the examiner to provide a copy of a forensic evaluation directly to the examinee.⁷⁵ Similarly, the examinee is rarely offered a feedback session to describe the results of testing.⁷⁶ Unlike the clinical goal of promoting the betterment of the patient's life circumstances, the purpose of a forensic evaluation is to assist the trier of fact or retaining attorney.⁷⁷ From the examinee's perspective, this may or may not promote improved circumstances.⁷⁸ Lastly, a forensic evaluation would not include the treatment recommendations that stem from a clinical evaluation's findings unless they are specifically requested.⁷⁹

70. AM. PSYCHOL. ASS'N, Ethical Principles of Psychologists and Code of Conduct, <http://www.apa.org/ethics/code/index.html> (last updated Jan. 1, 2017).

71. Informed Consent, *supra* note 58, at 2.

72. *Id.* at 3.

73. Bush, *supra* note 48, at 1001–02.

74. Informed Consent, *supra* note 58, at 3.

75. Bush, *supra* note 48, at 1001.

76. Boyers, *supra* note 57, at 12; Bush, *supra* note 48, at 1002.

77. *Id.*

78. *Id.*

79. Informed Consent, *supra* note 58, at 3.

VI. Domains Neuropsychologists Assess

Neuropsychological testing and the process of collecting information allows the assessment of functioning within several domains. While all neuropsychologists consider the following domains to varying degrees, certain domains are a greater focus in forensic evaluations. For example, while all neuropsychologists evaluate the level of effort their examinee puts forward during testing, this as well as the examinee's potentially biased responses are considered more closely in forensic assessments. This Section will address the most common domains assessed in forensic evaluations.

A. Orientation

Orientation relates to an individual's level of confusion, level of alertness, and awareness of the task at hand.⁸⁰ In the broadest sense, an oriented individual knows who they are, where they are, has a sense of the day and time, and understands their current situation.⁸¹ Orientation is related to the quality of sleep, quality of diet (especially among individuals suffering from diabetes or alcoholism), and a wide variety of other common medical illnesses.⁸² Decreased orientation is also seen among a wide variety of brain disorders.

B. Attention

Attention refers to the level of focus in the moment on events happening around us, and has a basis in the individual's general level of orientation.⁸³ Attention might include noticing when someone has begun speaking or recognizing a car is turning in front of you.⁸⁴ It also involves being "in the moment" for long enough to track more than one separate idea.⁸⁵ For experiences to register in one's mind (i.e., so they

80. See Esther Heerema, *Alert and Oriented x1, x2, x3, and x4 in Dementia*, VERYWELL HEALTH, <https://www.verywellhealth.com/what-is-orientation-and-how-is-it-affected-by-dementia-98571> (last updated Nov. 5, 2019).

81. See *id.*

82. See NAT'L INST. ON AGING, *What Do We Know About Diet and Prevention of Alzheimer's Disease?*, <https://www.nia.nih.gov/health/what-do-we-know-about-diet-and-prevention-alzheimers-disease> (last updated Nov. 27, 2019).

83. See Kendra Cherry, *How Psychologists Define Attention*, VERYWELL MIND, <https://www.verywellmind.com/what-is-attention-2795009> (last updated July 25, 2020).

84. See *id.*

85. See generally *id.*

could later become a memory) an individual must have sufficient attentional ability in the moment.⁸⁶

Attention is thought of as a necessary precursor to many other cognitive processes the brain is involved in.⁸⁷ For instance, an individual who has difficulty focusing on what they are told (i.e., because their mind is wandering) is unlikely to understand what was said.⁸⁸ Similarly, a person who is overly distracted by everyday sounds while reviewing their bank statement is unlikely to understand the statement, even if they have intact mathematical skills.⁸⁹ Emotional challenges also masquerade as attention problems. Specifically, an individual who has difficulty focusing on what they are told because they are preoccupied with anxious thoughts or psychotic beliefs is unlikely to understand what was said, simply because their focus was on other matters.

C. Memory

Memory includes the ability to bring to mind an accurate recollection of events that were witnessed, the subject of past conversations, or the result of previous efforts to solve a problem that may have failed.⁹⁰ Neuropsychologists can assess a wide variety of different types of memory, all of which relate in various ways to the examinee's competence.⁹¹ For instance, the ability to recall verbal information, such as previous conversations with one's attorney, has different relevance than one's ability to remember visual information—an ability that directly impacts getting lost while driving.⁹²

Other distinctions made within the broader domain of memory involve short-term versus long-term memory. Deficits in short-term

86. See generally *id.*

87. Cf. David P. McCabe et al., *The Relationship Between Working Memory Capacity and Executive Functioning: Evidence for a Common Executive Attention Construct*, 24 *NEUROPSYCHOLOGY* 222, 228 (2010).

88. See Cherry, *supra* note 83.

89. Cf. *id.*

90. See Kendra Cherry, *What Is Memory?*, VERYWELL MIND, <https://www.verywellmind.com/what-is-memory-2795006> (last updated May 15, 2020).

91. See generally Neuropsychological Evaluation FAQ, *supra* note 5.

92. See generally TENTOUCH, *Understanding the difference between Visual vs. Verbal memories* (Oct. 13, 2015), <https://medium.com/ten-touch/understanding-the-difference-between-visual-vs-verbal-memories-457093beede9>.

memory limit an individual's ability to form judgments on recently discussed information.⁹³ Deficits in long-term memory limit an individual's ability to incorporate past experiences when making new decisions.⁹⁴ For instance, an individual with long-term memory deficits could not consider their previous losses in the stock market when making decisions about new investment opportunities.⁹⁵

Weak memory is one of the most outwardly apparent signs of cognitive decline, but it is important to note that even those with poor memory may still retain relatively intact abilities within other cognitive domains. Additionally, several other deficits can masquerade as poor memory. These include poor attention, which leads to "missing" something that is said in the first place, or deficits in language comprehension, as will be discussed in the following Section.

D. Language

Language abilities are generally broken up into two broad categories.⁹⁶ The first involves the ability to understand what someone else is saying to you or what you are reading. This is commonly referred to as language comprehension, although neuropsychologists are more likely to use the term receptive language.⁹⁷ Receptive language abilities are distinct from expressive language abilities which involve communicating to those around us through speech, writing, or sign language.⁹⁸ The cause of a receptive language disorder has nothing to do with being hearing impaired.⁹⁹ Instead, difficulties with receptive language stem

93. See generally Kim Ann Zimmermann, *What Is Short-Term Memory Loss?*, LIVESCIENCE (Apr. 24, 2017), <https://www.livescience.com/42891-short-term-memory-loss.html>.

94. See generally *id.*

95. See generally *id.*

96. See Amanda Reyes, *The Difference Between Receptive and Expressive Language*, NAPA (May 16, 2020), <https://napacenter.org/receptive-vs-expressive-language/>.

97. See Ann Logsdon, *An Overview of Receptive Language Issues*, VERYWELL FAMILY, <https://www.verywellfamily.com/receptive-language-disorders-2162451#:~:text=A%20receptive%20language%20disorder%20is%20believed%20to%20involve%20developmental%20disorders%20such%20as%20autism%20and%20Down%20syndrome> (last updated Apr. 15, 2020).

98. See *id.*

99. Cf. THE UNDERSTOOD TEAM, *Understanding Receptive Language Disorder in Your Child*, <https://www.understood.org/en/learning-thinking-differences/child-learning-disabilities/communication-disorders/receptive-language-disorder-in-children> (last visited Sept. 28, 2020).

from the brain's ability to process what the ears are correctly "hearing."¹⁰⁰

Practically speaking, individuals suffering from a receptive language disorder may (incorrectly) appear to the practitioner to suffer from a memory deficit.¹⁰¹ Rather than having a genuine weakness in remembering an earlier conversation, deficits in receptive language limit understanding of what was said in the first place.¹⁰²

These difficulties with processing what others are saying can be understandably embarrassing for the individual. The embarrassment that stems from continually asking others to repeat themselves also results in a reluctance to ask for clarification. Alternately, when an individual does not recognize they are misperceiving what was said, another set of challenges ensues. Specifically, if this individual is asked a question about apples, their misperception of the question may result in a response pertaining to oranges. While receptive language ability is not a disorder of hearing, it is worth considering that those who are hearing impaired may similarly not "remember" what others in the room heard.¹⁰³

Expressive language disorders can be best thought of as challenges communicating ideas the individual can fully form within their mind. Expressive language disorders may present themselves in a variety of ways. Sometimes, the ability to speak is interrupted by frequent instances of the "tip of the tongue phenomenon," or periods of "blanking out." These events are referred to as anomia. More debilitating conditions involve an inability to form words at all, or even forming sentences that are confusing to the point that they might be described as "word salad."¹⁰⁴ Word salad is a descriptor of an assemblage of words that seem like they could fit into a sentence, but have been metaphorically tossed in the air, scrambling them.¹⁰⁵ After these words land in the

100. See generally SARA ROSENBAUM & PATTI SIMON, SPEECH AND LANGUAGE DISORDERS IN CHILDREN: IMPLICATIONS FOR THE SOCIAL SECURITY ADMINISTRATION'S SUPPLEMENTAL SECURITY INCOME PROGRAM, 54 *Inst. Med. et al. eds.*, (1st ed. 2016), <https://www.ncbi.nlm.nih.gov/books/NBK356270>.

101. Cf. Logsdon, *supra* note 97.

102. Cf. *id.*

103. See generally BETTERHEALTHCHANNEL, Receptive language disorder, <https://www.betterhealth.vic.gov.au/health/healthyliving/receptive-language-disorder> (last updated Sept. 2016).

104. See Logsdon, *supra* note 97.

105. See Aimee Eyvazzadeh, *What You Need to Know About Anomic Aphasia*, HEALTHLINE (Jan. 29, 2020), <https://www.healthline.com/health/anomic-aphasia>.

salad bowl, they come across as profoundly confusing for the listener.¹⁰⁶ Notably, individuals with difficulties expressing their thoughts are at an elevated risk of being presumed incompetent when they can appropriately express well-reasoned preferences through non-traditional means.¹⁰⁷ Situations like these can be profoundly challenging for practitioners, but consulting with a speech-language pathologist can yield strategies to allow these clients to express their preferences appropriately.¹⁰⁸

E. Executive Functioning

Executive functioning relates to several complex skills, including planning, organizing, and working through problems in a linear or logical fashion.¹⁰⁹ Relatedly, clinicians often refer to executive dysfunction as a lack of mental flexibility. Executive functioning also refers to an individual's ability to initiate a new task or know when it makes sense to stop or inhibit a behavior that no longer achieves the desired goal.¹¹⁰ Difficulties with initiation in daily life may include the inability to find the motivation to contact the phone company after service has been disconnected.¹¹¹ Difficulties with inhibition are similar to being "set in our ways."¹¹² But they could involve the failure to transition to a new topic of conversation when others in the room feel that matter has been resolved.¹¹³ Failure to inhibit may also result in becoming "stuck" on specific conversations, which clinicians refer to as perseveration.¹¹⁴ In the most extreme scenarios, highly disinhibited individuals may make grossly inappropriate sexual comments, or engage in high-risk activities such as gambling, despite not engaging in these behaviors in earlier

106. See generally LINGRAPHICA, *Wernicke's Aphasia?*, <https://www.aphasia.com/aphasia-resource-library/aphasia-types/wernickes/> (last visited Sept. 28, 2020).

107. See *id.*

108. See generally *id.*

109. See Eyvazzadeh, *supra* note 105.

110. See Executive Function and Executive Function Disorder, WEBMD, <https://www.webmd.com/add-adhd/executive-function> (last updated Mar. 25, 2019).

111. See generally *id.*

112. Cf. *id.*

113. See *id.*

114. See Perseveration, THE FREE DICTIONARY, <https://medical-dictionary.thefreedictionary.com/perseveration> (last visited Sept. 28, 2020).

years.¹¹⁵ In this way, executive functioning is closely related to impulsivity or the tendency to act without anticipating the outcome of that choice.¹¹⁶ This concept of impulsivity is perfectly demonstrated by the phrase uttered by mothers everywhere: “Think before you act next time.”

Of greatest relevance to the practitioner, executive functioning impacts the quality of someone’s judgment.¹¹⁷ When a client lacks the previously mentioned planning, organization, and inhibition abilities, they are less able to form logical, well-reasoned choices.¹¹⁸ Beyond impacting the quality of decision-making in the moment, executive dysfunction similarly limits one’s ability to take a bird’s-eye view of the overall situation in order to recognize previous thinking errors.¹¹⁹

F. Motor Functioning

Neuropsychologists break motor functioning into two categories: gross motor movements, and fine motor movements. Gross motor movements include walking or turning a steering wheel.¹²⁰ Fine motor movements involve opening a can of beans or buttoning one’s shirt.¹²¹ These two distinctions are very broad, and while these are areas neuropsychologists commonly assess—an exhaustive evaluation of motor functioning would be conducted by a physical therapist or occupational therapist.¹²²

115. Cf. Jaime Herndon, Executive Dysfunction, HEALTHLINE, <https://www.healthline.com/health/executive-dysfunction#1> (last updated Apr. 12, 2018).

116. See Kristalyn Salters-Pedneault, What Is Impulsivity?, VERYWELLMIND (July 10, 2020), <https://www.verywellmind.com/impulsive-behavior-and-bpd-425483>.

117. See *id.*

118. See Sanjeev Swami, *Executive Functions and Decision Making: A Managerial Review*, 25 IIMB MGMT. REV. 203, 204 (2013), <https://www.sciencedirect.com/science/article/pii/S0970389613000645>.

119. See *id.*

120. See Claudia Voelcker-Rehage, *Motor-Skill Learning in Older Adults – A Review of Studies on Age-Related Differences*, 5 EUR. REV. AGING & PHYSICAL ACTIVITY 5, 5 (2008), <https://eurapa.biomedcentral.com/articles/10.1007/s11556-008-0030-9>.

121. See *id.*

122. See Sara Zuboff, *Occupational Therapy vs. Physical Therapy: Tools, Techniques & More*, PRO HEALTHCARE PRODUCTS.COM (June 27, 2016), <https://www.prohealthcareproducts.com/blog/occupational-therapy-vs-physical-therapy-tools-techniques-more/>.

Practitioners should also be aware of driver rehabilitation programs, which maintain driving simulators to assess driving abilities.¹²³ In these simulators, the examinee sits at a steering wheel in front of a large screen.¹²⁴ They are then presented with a series of events to respond to while driving on virtual streets.¹²⁵ This approach goes well beyond assessing motor functioning and offers a much more precise and sensitive assessment of real-world driving ability than neuropsychologists could hope to provide.¹²⁶ Having said that, in situations where an individual's overall neuropsychological functioning is sufficiently low, neuropsychologists can appropriately weigh in on this matter.¹²⁷ Unfortunately, these testing facilities are not necessarily available in all regions of the country.¹²⁸

G. Calculation

The calculation domain encompasses the ability to perform mental math, which is essential for individuals who regularly transact using paper currency.¹²⁹ Solely relying on the cashier to correctly make change opens up opportunities to be taken advantage of.¹³⁰ Additionally, individuals who continue to balance their checkbooks by hand can suffer problems if significant errors are made.¹³¹ Because our economy is moving more toward credit cards, and because individuals—or trusted loved ones—can monitor account balances via the internet, the

123. NAT'L HIGHWAY TRAFFIC SAFETY ADMIN., PROCESS AND OUTCOMES EVALUATION OF OLDER DRIVER SCREENING PROGRAMS: THE ASSESSMENT OF DRIVING-RELATED SKILLS (ADRES) OLDER-DRIVING SCREENING TOOL (2011), <https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/811113.pdf>.

124. *Id.*

125. *Id.*

126. *Id.*

127. See Alice Pomidor et al., *Clinician's Guide to Assessing and Counseling Older Drivers*, AM. GERIATRICS SOC'Y (2016), https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/812228_cliniciansguidetoolderdrivers.pdf.

128. See Marian E. Betz et al., *Driving Rehabilitation Programs for Older Drivers in the United States*, 28 OCCUPATIONAL THERAPY IN HEALTH CARE 306, 307 (2014), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4347878/>.

129. See Radouane El Yagoubi, *Effects of Aging on Arithmetic Problem-Solving: An Event-Related Brain Potential Study*, 17 J. COGNITIVE NEUROSCIENCE 37, 37 (2005), https://www.researchgate.net/publication/8031985_Effects_of_Aging_on_Arithmetic_Problem-Solving_An_Event-related_Brain_Potential_Study.

130. See Tara Siegel Bernard, *As Cognition Slips, Financial Skills are Often the First to Go*, N.Y. TIMES (Apr. 24, 2015), <https://www.nytimes.com/2015/04/25/your-money/as-cognition-slips-financial-skills-are-often-the-first-to-go.html>.

131. See *id.*

risks of diminished calculation skills may be lower.¹³² Intact abilities in this area, however, remain beneficial.¹³³ Arithmetic, along with memory, are also implicated in the ability to allocate larger sums of money between different financial instruments.

H. Intellectual Functioning

The intellectual quotient or “IQ” measures several different areas to determine intellectual functioning.¹³⁴ Generally speaking, intelligence can be thought of as an assessment of general mental ability or abstract reasoning.¹³⁵ Areas commonly considered in tests of intellectual functioning include:

- the knowledge base or amount of learned information possessed;
- the ability to comprehend and reason using language;
- the ability to reason using pictures or to work with three-dimensional objects;
- the ability to hold onto information long enough to process it; and
- the speed an individual’s mind can take in new information.¹³⁶

Broadly speaking, deficits in intellectual functioning limit an individual’s ability to comprehend and coordinate complex tasks throughout life.

I. Adaptive Functioning

Adaptive functioning refers to one’s aggregate abilities to function in the real world.¹³⁷ Tests assessing adaptive functioning come in two forms and bridge the final gap between in-office testing and real-world

132. *See id.*

133. *See id.*

134. MENTALHELP.NET, *Intellectual Functioning (Mental Abilities)*, <https://www.mentalhelp.net/intellectual-disabilities/intellectual-functioning-mental-abilities> (last visited Sept. 28, 2020).

135. *Id.*

136. Daniel J. Reschly et al., *MENTAL RETARDATION: DETERMINING ELIGIBILITY FOR SOCIAL SECURITY BENEFITS*, NAT’L RES. COUNCIL (2002), <https://www.ncbi.nlm.nih.gov/books/NBK207539>.

137. *Id.*

functioning.¹³⁸ The first type directly tests the examinee's ability to manage the challenges of daily life.¹³⁹ The second type obtains information from outside observers on the examinee's abilities.¹⁴⁰ Adaptive functioning includes skills such as:

- maintaining safety (i.e., knowing how to call 911, turning off the stove);
- caring for basic needs (i.e., bathing, making doctor appointments, cooking);
- connecting with others (i.e., social skills, involvement with family/community); and
- navigating the demands the world places on us (i.e., paying bills, caring for a pet).¹⁴¹

In the first type of assessment that directly assesses ability, the examinee is presented with a real-world situation, and their response to this situation is examined.¹⁴² Some of these tasks involve providing a mock utility bill, a mock checkbook, and a check register, and then asking the examinee to pay their bill.¹⁴³ Other test components might include asking questions about what they would do if they witnessed a car accident through their window, showing how they would microwave a meal, or requiring them to tell time.¹⁴⁴

Asking an individual to report how well they balance their checkbook, how well they remember to take their medications, or how they maintain their household is likely to result in limited useful information.¹⁴⁵ Therefore, a second type of assessment is employed.¹⁴⁶ These structured assessments consist of questionnaires that assess an outsider's perspective of the examinee's ability to care of themselves.¹⁴⁷ These tests gather subjective information about tasks the examinee can and cannot manage. Because of the subjective nature of these ratings,

138. See *id.*; see also MENTALHELP.NET, *Tests of Adaptive Functioning*, <https://www.mentalhelp.net/intellectual-disabilities/tests-of-adaptive-functioning> (last visited Sept. 28, 2020) [hereinafter *Tests of Adaptive Functioning*].

139. See *Tests of Adaptive Functioning*, *supra* note 138.

140. See *id.*

141. See *id.*; see also MENTALHELP.NET, *Adaptive Behavior (Life Skills)*, <https://www.mentalhelp.net/intellectual-disabilities/adaptive-behavior-life-skills/> (last visited Sept. 28, 2020) [hereinafter *Adaptive Behavior (Life Skills)*].

142. See *Tests of Adaptive Functioning*, *supra* note 138.

143. See *id.*

144. See *id.*

145. See *id.*

146. See *id.*

147. See *id.*

they are generally given to multiple members of an individual's support system who are in regular contact with the examinee.¹⁴⁸

J. Risk Assessment

Risk assessment refers to a clinician's assessment of the likelihood of something catastrophic happening to the examinee.¹⁴⁹ Often, different risks are evaluated by different clinicians.¹⁵⁰ For example, occupational therapists or nurses would be much more likely to assess the ability to climb stairs or cook a meal safely.¹⁵¹ Physicians, in contrast, would weigh in on how well their patient is managing their diabetes.¹⁵² Social workers and psychologists would overlap a great deal in terms of their approach to assessing domestic violence risk.¹⁵³ There are formal assessments for some types of risk, but for many, risk assessment is performed through a clinical interview and consideration of available information.¹⁵⁴ Typical areas of risk assessment that are relevant to elder law practitioners include:

- domestic violence risk within the residence;
- risks of verbal abuse;
- level of social isolation;
- ability to adequately manage one's medical conditions;
- susceptibility to financial abuse;
- physical safety concerns such as the likelihood of falling or leaving the stove on; and
- environmental safety concerns such as stairs or clutter in the home.¹⁵⁵

148. See *id.*

149. See Ashimesh Roychowdhury & Gwen Adshead, *Violence Risk Assessment as a Medical Intervention: Ethical Tensions*, 38 *PSYCHIATRIC BULL.*, 75, 77 (2014), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4115407/>; see also Minimol K, *Risk Assessment and Strengths Based Case Management in Elderly Care—Scope of Social Work Practice*, 15 *ARTHA J. SOC. SCI.* 121, 123–24 (2016), <https://core.ac.uk/download/pdf/236433397.pdf> [hereinafter Minimol].

150. See Minimol, *supra* note 149.

151. Elizabeth A. Phelan et al., *Assessment and Management of Fall Risk in Primary Care Settings*, 99 *MED. CLINICS NORTH AM.* 281, 285 (2015), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4707663/>.

152. Bertram Häussler et al., *Risk Assessment in Diabetes Management: How do General Practitioners Estimate Risks Due to Diabetes?*, 16 *QUALITY & SAFETY HEALTH CARE* 208, 208 (2007).

153. See Minimol, *supra* note 149.

154. *CLINICAL RISK ASSESSMENT PROCEDURE*, TAVISTOCK & PORTMAN NHS FOUND. TRUST 7 (2019), https://tavistockandportman.nhs.uk/documents/5/Clinical-risk-assessment_Procedure_v_2.5_June_19.pdf.

155. Minimol, *supra* note 149.

K. Emotional Assessment

Psychological testing is the process of evaluating a variety of “feelings” related matters. In addition to clinical interviews, a psychological evaluation is performed using standardized measures which are developed similarly to the way neuropsychological tests are developed.¹⁵⁶ The range of different emotional functions assessed is broad, but areas most relevant to elder law attorneys include:

- mood (happiness, sadness, hopelessness);
- presence of psychosis (hallucinations, delusions, reality testing);
- personality factors such as dependence or reactivity;
- frustration tolerance;
- anxiety; and
- willingness to work with others.¹⁵⁷

To assess these areas meaningfully, psychological tests compare the examinee’s perception of the world and beliefs about themselves to what is considered “typical.”¹⁵⁸ Like neuropsychological testing, psychological tests are interpreted relative to a normative sample. This process of comparing the individual’s responses to those of like individuals increases the accuracy of conclusions drawn and reduces bias on the part of the examiner. These tests also include validity indicators that assess the honesty and openness of the examinee’s responses.¹⁵⁹ Validity indicators will be described in greater detail in the following Section.

L. Validity

Because the stakes of forensic evaluations are high, examinees may be motivated to bias their responses to test questions in a direction intended to achieve a desired outcome.¹⁶⁰ The motivation underlying

156. INST. MED., *PSYCHOLOGICAL TESTING IN THE SERVICE OF DISABILITY DETERMINATION* (2015), <https://www.ncbi.nlm.nih.gov/books/NBK305233/> [hereinafter PSYCHOLOGICAL TESTING].

157. See GARY CREWS LAW, *How Do I Know When My Parents Need Help?*, <https://garycrewslaw.com/how-do-i-know-when-my-parents-need-help/> (last visited Sept. 28, 2020); see also Lenore A. Hawley, *Self-Advocacy for Independent Life*, COLO. TRAUMATIC BRAIN INJURY TRUST FUND (2014), <https://biacolorado.org/wp-content/uploads/2015/03/SAIL-20141.pdf>.

158. See PSYCHOLOGICAL TESTING, *supra* note 156.

159. Michael Gamache, *Validity Indicator Profile resources*, AM. PSYCHOL. L. SOC’Y NEWS, <https://www.pearsonassessments.com/campaign/validity-indicator-profile-resources.html#:~:text=The%20Primary%20Validity%20Indicators%20include,index%2C%20and%20individual%20consistency%20index> (last visited Sept. 27, 2020).

160. See PSYCHOLOGICAL TESTING, *supra* note 156.

this bias is referred to as secondary gain.¹⁶¹ Sometimes, these biases are unconscious and outside of the control of the examinee. At other times they represent active efforts to achieve a desired outcome. Regardless of the intention underlying these phenomena, if an examinee's biases were not assessed, they would erode the value of any conclusions drawn.¹⁶² Specifically, these validity indicators ensure that the data collected is interpretable and accurately represents the examinee's true abilities. Tests assessing validity are referred to as tests of effort, malingering, dissimulation, or response bias.¹⁶³ Colloquially, they might be thought of as tests to detect "faking."

The validity of an examinee's responses is assessed in varying ways depending on the overall domains evaluated in that series of administered tests.¹⁶⁴ On tests of cognitive functioning (i.e., neuropsychological tests), there are elements embedded into tests as well as stand-alone tests which assess incomplete effort or "sandbagging."¹⁶⁵ Including these validity indicators ensures that the data collected is valid, interpretable, and an accurate representation of the examinee's true abilities. Elder law practitioners should be aware that during evaluations where the individual is motivated to perform well on tests of cognition (i.e., when they fear being deemed incompetent), the probability of making intentional efforts to perform poorly is lower in comparison to individuals, for example, in personal injury proceedings.¹⁶⁶

In the context of competence evaluations and response bias, validity is of greater concern on tests assessing emotional functioning.¹⁶⁷ For this reason, some subscales within larger tests analyze a number of factors regarding how realistically the examinee is reporting their day-

161. David A. Fishbain, *Secondary Gain Concept: Definition Problems and Its Abuse In Medical Practice*, 3 J. PAIN 264, 265-67 (1994).

162. *Id.*

163. See Erin D. Bigler, *Effort, symptom validity testing, performance validity testing, and traumatic brain injury*, 28 BRAIN INJ. 1623, 1623-38 (2014).

164. Shane S. Bush et al., *Symptom validity assessment: Practice issues and medical necessity: NAN Policy & Planning Committee*, 20 ARCHIVES CLINICAL NEUROPSYCHOLOGY 419, 425 (2005).

165. *Id.*; see also Bryan Gibson & Daniel Sachau, *Sandbagging as a Self-Presentation Strategy: Claiming to be Less than You Are*, 26 PERSONALITY & SOC. PSYCHOL. BULL. 56, 56 (2000).

166. See William Mittenberg et al., *Base Rates of Malingering and Symptom Exaggeration*, J. CLINICAL EXPERIMENTAL NEUROPSYCHOLOGY (2002).

167. *Id.*

to-day functioning.¹⁶⁸ These indicators assess different factors which often include:

- the examinee's openness to acknowledging the kinds of everyday struggles that all humans have;
- other scales that assess the degree the examinee is portraying themselves in an overly positive light;
- the degree the examinee portrays themselves in an overly negative light;
- confusion or limited reading ability; and
- how infrequently the pattern of symptoms is seen among genuine patient populations.¹⁶⁹

By measuring these and other factors, examiners are alerted to invalid information that should be outright disregarded. At other times, when the degree of validity is only mildly compromised, there may be ways of statistically adjusting the data interpretation to produce conclusions that accurately represent the examinee's true level of functioning.

M. Civil Capacity Instruments

The development of instruments that directly assess individual capacities is in its infancy. As such, these instruments' reliability and validity do not yet meet the same standard as the overall body of neuropsychological tests.¹⁷⁰ While drawing conclusions solely from one of these instruments would be inadvisable and may not meet evidentiary admissibility criteria, incorporating information gleaned from these instruments into a complete series of neuropsychological tests adds considerable value to the overall evaluation.¹⁷¹

There are two main categories of civil capacity instruments.¹⁷² The first category involves questionnaires assessing the examinee's knowledge of information relating to the statutory standards at issue.¹⁷³ The patient's responses to this series of questions are compared to the

168. *Overview of Psychological Testing*, PSYCHOLOGICAL TESTING SERV. DISABILITY DETERMINATION (June 29, 2015), <https://www.ncbi.nlm.nih.gov/books/NBK305233/>.

169. *Id.*

170. Karen A Sullivan, *Civil capacity instruments: Research trends and recommendations for future research*, AM. PSYCHOLOGICAL ASS'N, <https://psycnet.apa.org/record/2011-27638-010> (last visited Sept. 28, 2020).

171. *See id.*

172. AM. BAR ASS'N, *Clinical Models of Capacity* (Mar. 25, 2005) https://www.americanbar.org/content/dam/aba/administrative/law_aging/2012_aging_capacity_hbk_ch3.pdf.

173. *Id.*

responses of those who have previously been adjudicated as competent, allowing meaningful comparisons to be drawn.¹⁷⁴

The second type of instrument falls into the category of a structured interview.¹⁷⁵ On these tests, the examiner asks specific questions and then rates the quality of the examinee's responses using a systematic rating rubric.¹⁷⁶ Some of these interviews use a set of standardized vignettes related to the competence being assessed while others allow the examiner to create situation-specific questions about the matter at hand. In the latter scenario, for instance, an individual being assessed for competence to consent to the surgical repair of their heart valve could receive questions that are personalized to assess their understanding of risks and benefits of that specific type of surgery. Structured interviews such as this allow the examiner tremendous flexibility to create relevant assessments. The trade-off is that this lack of uniformity in personalized test questions results in decreased ability to compare the examinee's responses to a normative database.

VII. Diagnosis

A diagnosis can be thought of as a shorthand way for clinicians to differentiate one commonly seen cluster or constellation of symptoms from another distinct cluster of commonly observed symptoms.¹⁷⁷ The process of determining a diagnosis consists of five general components:

- interview information gleaned from the examinee;
- information from collateral sources such as the examinee's family member;
- review of medical records;
- the impact of deficits on the examinee's ability to function in daily life; and
- measured or subjectively assessed cognitive functioning.¹⁷⁸

Once this information is collected, the examinee's specific patterns of measured cognitive functioning and reported symptoms are compared to recognized patterns of symptoms seen within various possible

174. *Id.*

175. *Id.*

176. *Id.*

177. See *Diagnosis*, WEBSTERS DICTIONARY, <https://www.webster-dictionary.org/definition/diagnosis> (last visited Sept. 28, 2020).

178. See AM. PSYCHOL. ASS'N & AM. BAR ASS'N, *Assessment of Older Adults with Diminished Capacity*, (2008), <https://www.apa.org/pi/aging/programs/assessment/capacity-psychologist-handbook.pdf>.

diagnoses.¹⁷⁹ The ultimate diagnosis is then determined by how closely the examinee's pattern fits with the one disorder's pattern versus another.¹⁸⁰

Specific criteria for a given diagnosis are outlined in one of two diagnostic systems.¹⁸¹ The first is the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders ("DSM-5").¹⁸² The second is the tenth edition of the International Classification of Disease ("ICD-10").¹⁸³ Diagnoses provide valuable information to determine treatment and provide information on how a disease may progress over time, referred to as prognosis.¹⁸⁴

A. Diagnoses Commonly Seen in Elder Law Practice

Broadly speaking, disorders of the brain are categorized into two broad categories.¹⁸⁵ Cognitive disorders affect one's ability to think and include diagnoses such as dementia, a traumatic brain injury, or an intellectual disability.¹⁸⁶ This category of disorders is referred to as neuropsychological disorders, neurological disorders, and developmental disorders, among others. The reader is encouraged to consider that meeting criteria for a diagnosis, such as dementia, does not represent

179. *Id.*

180. CLINICAL NEUROPSYCHOLOGY: A POCKET HANDBOOK FOR ASSESSMENT, AM. PSYCHOL. ASS'N (Peter J. Snyder et al. eds., 2d ed. 2007).

181. P.K. Dalal & T. Sivakumar, *Moving Towards ICD-11 and DSM-V: Concept and Evolution of Psychiatric Classification*, 51 INDIAN J. PSYCHIATRY 310, 310 (2009).

182. AM. PSYCHIATRIC ASS'N, *supra* note 34.

183. THE ICD-10 CLASSIFICATION OF MENTAL AND BEHAVIOURAL DISORDERS: CLINICAL DESCRIPTIONS AND DIAGNOSTIC GUIDELINES, WORLD HEALTH ORG. (10th ed. 1992), <https://apps.who.int/iris/handle/10665/37958>.

184. Peter Croft et al., *The science of clinical practice: disease diagnosis or patient prognosis? Evidence about "what is likely to happen" should shape clinical practice*, BMC MED. (Jan. 30, 2015), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4311412/>.

185. See Merovitz Potechin, *Incapacity is Not Synonymous with Dementia*, MEROVITZ POTECHIN LLC (Mar. 21, 2019), <https://www.merovitzpotechin.com/incapacity-is-not-synonymous-with-dementia/#:~:text=While%20a%20diagnosis%20of%20dementia,need%20to%20make%20a%20will>; see also OER SERVS., *Emotional Health and Mental/Emotional Disorders*, <https://courses.lumenlearning.com/suny-diseaseprevention/chapter/emotional-health-and-mentalemotional-disorders/> (last visited Sept. 28, 2020) [hereinafter *Emotional Health*].

186. Potechin, *supra* note 185.

prima facie evidence of incompetence.¹⁸⁷ It is very possible to suffer dementia and maintain competence.¹⁸⁸ Conversely, it would be uncommon for an individual to be incompetent and not meet the criteria for a diagnosis.¹⁸⁹ Further, while different stages of dementia have been defined, there is no one-to-one equivalence between the stage of dementia and the likelihood of incapacity.¹⁹⁰ To be sure, later stages of dementia are associated with a higher probability of incompetence.¹⁹¹ But still, staging systems commonly used within the medical community are not designed to assess factors that track onto legal statutes.¹⁹²

The second category of brain dysfunction includes emotional disorders which impact one's feelings, mood, level of anxiety, or denote the presence of psychosis.¹⁹³ This category of disorders is variously referred to as psychological disorders, psychiatric disorders, behavioral disorders, or neuropsychiatric disorders, among others.

There is also some overlap between what is considered psychological and what is considered neuropsychological.¹⁹⁴ For instance, we have all had days or even extended periods of depression.¹⁹⁵ By and large, depression is characterized as a psychological disorder.¹⁹⁶ During these depressive episodes we also notice that our level of motivation and the speed at which we think (which is often considered cognitive processes) have slowed. Cognitive slowing among individuals who simultaneously experience the earliest signs of dementia can have a very different effect. The additive effect of depression and, very early, prodromal signs of dementia, can reduce all cognitive abilities—which

187. Soumya Hedge & Ratnavalli Ellajosyula, *Capacity issues and decision making in dementia*, ANNALS OF INDIAN ACAD. OF NEUROLOGY (Oct. 19, 2016), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5109759/>.

188. *Id.*

189. *See id.*

190. *See* Dementia, WORLD HEALTH ORG. (Sept. 21, 2020), <https://www.who.int/news-room/fact-sheets/detail/dementia>.

191. *Id.*

192. *See* R. Ryan Darby & Bradford C. Dickerson, *Dementia, Decision-Making, and Capacity*, 25 HARV. REV. PSYCHIATRY 270, 270–71 (2018).

193. *Emotional Health*, *supra* note 185.

194. Ruben J. Echemendia et al., *Assessment in sports: psychological and neuropsychological approaches*, HANDBOOK PYSCH. ASSESSMENT (4th ed. 2019).

195. *See* NAT'L INST. MENTAL HEALTH, *Depression Basics*, <https://www.nimh.nih.gov/health/publications/depression/index.shtml> (last visited Sept. 28, 2020).

196. *See id.*

calls into question the individual's competence. The effect of early cognitive decline and depression is referred to as pseudodementia.¹⁹⁷ The successful treatment of the depression, however, will commonly lift the "fog," allowing these individuals to resume competent decision-making.

The following clinical disorders will be described individually to promote clarity. Still, as demonstrated in the scenario above, people living in the real world are not limited to one disease at a time. In fact, the presence of multiple co-occurring or comorbid disorders increases the likelihood of cognitive decline and incompetence.¹⁹⁸

1. COGNITIVE DISORDERS

This category of neuropsychological or "thinking" disorders can present from birth, can develop steadily over time, and can emerge after a brain injury.¹⁹⁹ The most common cognitive disorders seen by elder law practitioners will fall under the umbrella category of dementia.²⁰⁰ Although, because one disorder rarely exists within a vacuum, the possibility of multiple contributors to incompetence should be considered. These different contributors are also referred to as etiologies.

Dementia is a broad term encompassing a variety of different subtypes. A dementia diagnosis is made when an individual experiences impairment in two or more cognitive domains.²⁰¹ Clinically speaking, the level of debilitation necessary to meet criteria for a diagnosis is described as clinically significant dysfunction.

It is important to mention that the various types of dementia have subtle differences that both characterize the individual's difficulties, and help clinicians differentiate one type from another. For example, symptoms of impaired memory and attention signals a different underlying cause than dementia that primarily impairs memory and language.²⁰² This pattern of symptoms is common among those developing

197. Henry Brodaty & Michael H. Connors, Pseudodementia, pseudo-pseudodementia, and pseudodepression, *ALZHEIMER'S & DEMENTIA: DIAGNOSIS, ASSESSMENT & DISEASE MONITORING* (2020).

198. See Frances Brunn et al., *Comorbidity and dementia: a scoping review of the literature*, 12 *BMC MED.* 1, 1–2 (2014).

199. Julie Hugo & Mary Ganguli, *Dementia and Cognitive Impairment: Epidemiology, Diagnosis, and Treatment*, 30 *CLINICS GERIATRIC MED.* 421, 421–427 (2014) [hereinafter Hugo].

200. *Id.*

201. *Id.*

202. *Id.*

Alzheimer's dementia. Alzheimer's dementia can also be distinguished from Lewy body dementia because those suffering from the latter initially experience sleep disorders and vision disturbances.²⁰³ There is also an important distinction drawn between day-to-day memory difficulties and clinically significant impairment in memory. Periodic forgetfulness, for instance, would not meet the threshold to be considered impairment. Instead, a given cognitive weakness needs to affect abilities. Attorneys must also be aware that cognitive abilities among those diagnosed with dementia are progressive. This means that their level of impairment will worsen over time. While it is possible to slow the rate of cognitive decline with appropriate treatments, science has not discovered a way to reverse dementia.²⁰⁴

In addition to considering the pattern of measured impairment, the determinant of the specific type of dementia (i.e., Lewy body dementia vs. vascular dementia vs. Alzheimer's dementia) can be further identified by interviewing for the particular character of present symptoms.²⁰⁵ Further, the individual's neurobiology is taken into account.²⁰⁶ Neurobiology refers to the study of how neurons or brain cells are functioning and how this small-scale function contributes to the broader abilities of the whole brain. Among other information sources, a patient interview, lab tests, brain imaging, and family history all help the examiner understand the underlying neurobiology.

The following are descriptions of the most common types of dementia, which have been grossly simplified to promote (relative) brevity. The reader may also want to consider using this Section as a reference rather than reading it in its entirety. Additionally, the reader should be aware that individuals in the earlier stages of any dementia tend to exhibit a relatively distinct cognitive functioning pattern specific to that type of dementia.²⁰⁷ The cognitive abilities seen in the latter stages of all late-stage dementias, however, commonly progress to the

203. *Id.*

204. WORLD HEALTH ORG., WHO guidelines on risk reduction of cognitive decline and dementia, https://www.who.int/mental_health/neurology/dementia/risk_reduction_gdg_meeting/en/ (last visited Oct. 28, 2020).

205. *See generally id.*

206. *See generally id.*

207. DEMENTIA: UNDERSTAND TOGETHER, Types of dementia, <https://www.understandtogether.ie/about-dementia/what-is-dementia/types-of-dementia/#:~:text=There%20are%20over%20400%20different,Alzheimer's%20disease%20and%20vascular%20dementia> (last visited Sept. 28, 2020) [hereinafter Types of dementia].

point of impacting all areas of functioning rather dramatically.²⁰⁸ An outline of the distinguishing characteristics of the various dementias follows.

a. Alzheimer's Disease

Alzheimer's disease, also referred to as dementia of the Alzheimer's type, is the most common form of dementia.²⁰⁹ In its early stages, individuals primarily experience memory and language deficits.²¹⁰ The memory loss is subtle at first and might involve forgetting conversations much more frequently or experiencing significantly increased difficulties finding the "right" words (i.e., anomia).²¹¹ We all forget and sometimes struggle to find the word we are searching for, but the severity of anomia goes well beyond what is merely embarrassing and/or noticeable primarily to the speaker.²¹² Early emotional symptoms often mimic depression and those with Alzheimer's dementia often appear apathetic or lacking in initiative. As the condition progresses, other symptoms can emerge, including difficulty with reasoning, poor judgment, and changes in one's personality, such as irritability or aggression.²¹³ At the end stages of Alzheimer's, these individuals commonly forget where they live, and tragically, may forget the names of family members.²¹⁴

208. Lauren Reed-Guy, *The Stages of Dementia*, HEALTHLINE, <https://www.healthline.com/health/dementia/stages#types> (last updated Sept. 29, 2018).

209. Types of dementia, *supra* note 207.

210. ALZHEIMER'S ASS'N, *Stages of Alzheimer's*, <https://www.alz.org/alzheimers-dementia/stages> (last visited Sept. 28, 2020).

211. Cheryl Blanchard, *The Five "A's" of Alzheimer's*, ALZHEIMER'S TENN., <https://www.alztennessee.org/help/caregiver-support/caregiver-academy-videos/the-five-as-of-alzheimers-communication> (last visited Sept. 28, 2020).

212. Hugo, *supra* note 199.

213. *Id.*

214. ALZHEIMER'S ASS'N, *Memory Loss and Confusion*, <https://www.alz.org/help-support/caregiving/stages-behaviors/memory-loss-confusion> (last visited Sept. 28, 2020).

b. Vascular Dementia

Vascular dementia is a disease wherein blood flow to the brain is restricted.²¹⁵ These instances of blood “stoppage” are referred to as cerebrovascular accidents (“CVA”).²¹⁶ There are two different types of strokes.²¹⁷ The first is called either an ischemic stroke or multi-infarct dementia, where there is a blockage in the blood vessel, preventing blood from flowing.²¹⁸ The second type of CVA is called a hemorrhagic stroke; this is where a blood vessel bursts, harming the surrounding brain tissue reducing blood flow.²¹⁹ The result of either CVA is that the brain regions “downstream” from the accident are starved of oxygen and glucose, causing them to die.²²⁰ The degree of brain starvation, the size of the CVA, and the amount of bleeding all impact the severity of eventual cognitive decline.²²¹

Individuals suffering from multi-infarct dementia most frequently display increased confusion and difficulties with attention.²²² In more severe cases, or after the disease has progressed, individuals demonstrate challenges with planning, memory loss, and language.²²³ The neurobiological cause of multi-infarct dementia involves smaller strokes, or infarcts, which “pepper” the brain somewhat randomly, leading to the relatively diffuse (i.e., widespread) deficits.²²⁴

Because hemorrhagic strokes are localized to more discreet areas of the brain, abilities that are weakened correspond to the regions starved of nutrients. As a result, these individuals often demonstrate rather dramatic deficits within individual cognitive domains.²²⁵ The

215. MAYO CLINIC, *Vascular Dementia* (May 9, 2018), <https://www.mayoclinic.org/diseases-conditions/vascular-dementia/symptoms-causes/syc-20378793#:~:text=Vascular%20dementia%20is%20a%20general,t%20always%20cause%20vascular%20dementia>.

216. Mary Ellen Ellis, *Cerebrovascular Accidents*, HEALTHLINE, <https://www.healthline.com/health/cerebrovascular-accident> (last updated Sept. 29, 2018).

217. *Id.*

218. *Id.*

219. *Id.*

220. Prasanna Tadi & Forshing Lui, *Acute Stroke (Cerebrovascular Accident)*, STATPEARLS, (2020), <https://www.ncbi.nlm.nih.gov/books/NBK535369/>.

221. Hugo, *supra* note 199, 424.

222. *Id.* at 428.

223. See *Vascular dementia*, STANFORD HEALTH CARE, <https://stanfordhealthcare.org/medical-conditions/brain-and-nerves/dementia/types/vascular-dementia.html> (last visited Sept. 28, 2020).

224. Hugo, *supra* note 199, at 428.

225. Priscilla Corraini et al., *Long-Term Risk of Dementia Among Survivors Ischemic or Hemorrhagic Stroke*, 48 *STROKE* 180, 182–85 (2018).

specific thinking ability impacted is dictated by the area of the brain that was directly affected by the stroke.²²⁶ For instance, an individual with a hemorrhagic stroke may have dramatically limited language or very impulsive behaviors, while other abilities remain more preserved.²²⁷

Regarding emotional functioning among individuals suffering from vascular dementia, symptoms vary dramatically, depending on the area(s) of the brain most affected. Like those suffering from Alzheimer's disease, individuals with vascular dementia often experience a lack of initiative. In addition, they often become more irritable than they had been in the past. Individuals who have suffered a stroke often develop seizures, as described below.

c. Seizures

A seizure, which is also referred to as epilepsy, is an "electrical storm" or pattern of dysfunctional "brainwaves" as measured by an electrocephalogram ("EEG") or quantitative electrogram ("qEEG").²²⁸ The disordered electrical signal often originates in an area of damaged brain tissue, from which the electrical storm can generalize throughout the whole brain.²²⁹

Seizures are commonly associated with convulsions and render the individual unconscious for periods of time.²³⁰ This type of seizure is referred to as a tonic-clonic seizure.²³¹ More subtle seizures, however, often go unnoticed when they cause the person to "blank out" for a few seconds.²³² This type of seizure, commonly referred to as complex partial seizures or absence seizures, often masquerade as poor attention, since the individual is, indeed, "missing out" on parts of the conversation.²³³ There are also other types of seizures that occur when the electrical activity does not generalize throughout the brain.²³⁴ These focal seizures may cause a subtle muscle twitch, confusion, or impairment of

226. *Id.*

227. Etsuro Mori et al., *Visuoperceptual Impairment in Dementia with Lewy Bodies*, 57 *ARCHIVES NEUROLOGY* 489, 489–493 (2000).

228. A. JAMES ROWAN & EUGENE TOLUNSKY, *PRIMER OF EEG: WITH A MINI-ATLAS* (1st ed. 2003).

229. *See id.*

230. *Id.*

231. *See id.*

232. *See id.*

233. *See id.*

234. *See id.*

a single cognitive domain.²³⁵ In addition to strokes, traumatic brain injuries commonly result in seizures.²³⁶ Others experience longstanding seizure disorders which can be present from birth.²³⁷ Because seizures occur alongside, or are comorbid with, intellectual disabilities or autism spectrum disorders, the same mechanism underlying these disorders probably contributes to the seizures.²³⁸ Intellectual disability and autism spectrum disorders will be addressed in the coming Sections.

d. Lewy Body Dementia

Also referred to as Parkinson's disease dementia, or dementia with Lewy bodies, Lewy body dementia symptoms are typified by disturbances of sleep patterns, referred to as the sleep-wake cycle.²³⁹ Other characteristic symptoms include memory decline, and difficulties processing visual information. Challenges processing visual information do not stem from a need for eyeglasses in a manner similar to the way receptive language disorders are not the result of hearing loss.²⁴⁰ Instead, these visual-perceptual disturbances emerge from the brain's faulty interpretation of the stream of information coming from normally functioning eyes.²⁴¹ There are also instances where these individuals often experience symptoms similar to mild visual hallucinations which are properly classified as illusions rather than hallucinations.²⁴² With time, these individuals also develop problems with motor coordination.²⁴³

The primary difference between Lewy body dementia and Parkinson's disease dementia is that individuals with Parkinson's disease dementia have difficulties with motor functioning well before they suffer cognitive decline.²⁴⁴ Motor dysfunction in Parkinson's disease includes

235. *See id.*

236. *See id.*

237. *See id.*

238. *See id.*

239. *Id.*

240. *Id.*

241. *Id.*

242. *Id.*

243. *Id.*

244. *Parkinson's Disease Dementia*, ALZHEIMER'S ASS'N, <https://www.alz.org/alzheimers-dementia/what-is-dementia/types-of-dementia/parkinson-s-disease-dementia> (last visited Sept. 28, 2020).

tremors in which different parts of the body shake rhythmically.²⁴⁵ Other motor changes involve a person's ability to walk, referred to as gait abnormalities.²⁴⁶ Parkinson's disease also can cause freezing in which the person may briefly stand motionless, as their brain struggles to send the "go" message to the muscles.²⁴⁷

e. Frontotemporal Dementia

Frontotemporal Dementia, sometimes referred to as "FTD" or Pick's disease, is a term used to describe a cluster of diagnoses that involve declines in the memory and language abilities.²⁴⁸ But the most noticeable—and often most problematic—symptoms involve personality changes.²⁴⁹ These personality changes run the gamut from becoming mildly socially withdrawn and indifferent, to the opposite end of the spectrum involving irritability and a tendency to explosively overreact.²⁵⁰

One common symptom of frontotemporal dementia includes grossly inappropriate behavior.²⁵¹ These are behaviors that are much more severe than talking about topics that are considered off-limits "in polite company."²⁵² These behaviors stand out in that they may include frequent sexual references, touching others inappropriately, and illegal activities such as shoplifting or other impulsive and unpredictable aggression.²⁵³ Frontotemporal dementia is caused by the "shrinkage" or atrophy of the brain that happens when neurons within the frontal lobes (behind the forehead) and temporal lobes (behind the ears) die.²⁵⁴

245. Jeffrey M. Hausdorff, *Gait Dynamics in Parkinson's disease: Common and distinct behavior among stride length, gait variability, and fractal-like scaling*, 19 *CHAOS* 026113, 026113-1 (2009).

246. *Id.*

247. *See id.*

248. *Frontotemporal dementia*, MAYO CLINIC (Nov. 5, 2019), <https://www.mayoclinic.org/diseases-conditions/frontotemporal-dementia/symptoms-causes/syc-20354737#:~:text=Frontotemporal%20dementia%20is%20an%20umbrella,with%20personality%2C%20behavior%20and%20language>.

249. *Id.*

250. Behavioral Variant Frontotemporal Dementia, UNIV. CAL. S.F. WEILL INST. FOR NEUROSCIENCES, <https://memory.ucsf.edu/dementia/ftd/behavioral-variant-frontotemporal-dementia>.

251. *Id.*

252. *Id.*

253. *Id.*

254. *Id.*

Frontotemporal dementia is also frequently misdiagnosed.²⁵⁵ This misdiagnosis occurs in part because frontotemporal dementia emerges much earlier in life than other dementias, causing clinicians to presume there must be another cause.²⁵⁶ Symptoms of frontotemporal dementia overlap greatly with symptoms of other psychiatric disorders, which similarly leads to misdiagnosis.²⁵⁷

f. Multiple Sclerosis

Multiple sclerosis is another nervous system disorder in which the individual's immune system begins to attack the protective sheathing surrounding and insulating nerve fibers, or neurons.²⁵⁸ Some of the nerve fibers that are attacked are responsible for communication within the brain, and others run between the brain and body.²⁵⁹ Once connections between the brain and body break down, individuals can experience numbness, tremors, tingling, weakness, and pain.²⁶⁰ As this disorder progresses, difficulties with attention, memory, slurred speech, and swallowing can emerge.²⁶¹ Emotional symptoms commonly include fatigue and depression.²⁶² The brain of an individual suffering from multiple sclerosis exhibits multiple smaller lesions or areas of damaged brain tissue.²⁶³ The number of lesions tends to increase over time, and are widely distributed throughout the brain.²⁶⁴

255. *Frontotemporal Dementia*, ALZHEIMER'S ASS'N, <https://www.alz.org/alzheimers-dementia/what-is-dementia/types-of-dementia/frontotemporal-dementia> (last visited Sept. 28, 2020).

256. Shunichiro Shinagawa et al., *When a Little Knowledge Can Be Dangerous: False-Positive Diagnosis of Behavioral Variant Frontotemporal Dementia among Community Clinicians*, 41 *DEMENTIA & GERIATRIC COGNITIVE DISORDERS* 1, 2 (2016).

257. *Id.*

258. *Id.*

259. *Multiple Sclerosis*, MAYO CLINIC, <https://www.mayoclinic.org/diseases-conditions/multiple-sclerosis/symptoms-causes/syc-20350269> (last visited Sept. 28, 2020).

260. *Id.*

261. *Id.*

262. *MS Symptoms*, NAT'L MULTIPLE SCLEROSIS SOC'Y, <https://www.nationalmssociety.org/Symptoms-Diagnosis/MS-Symptoms> (last visited Sep. 28, 2020).

263. *Id.*

264. *Multiple Sclerosis: Frequently Asked Questions*, CLEVELAND CLINIC, <https://my.clevelandclinic.org/health/articles/14315-multiple-sclerosis-frequently-asked-questions> (last visited Sept. 28, 2020).

2. NON-PROGRESSIVE COGNITIVE DISORDERS

Other cognitive disorders that attorneys serving individuals with cognitive challenges will frequently see remain relatively unchanged over time and are considered non-progressive. Unlike the dementias or multiple sclerosis, non-progressive disorders are not neurodegenerative, meaning these individuals' abilities are not expected to decline rapidly as they age.²⁶⁵ It is advisable, however, to consider that all diseases interact with one another and are additive. For example, an individual who has suffered a significant traumatic brain injury (a non-progressive disorder) as a young adult may experience an earlier onset of dementia (a progressive disorder) as they age.²⁶⁶

a. Traumatic Brain Injury

A Traumatic Brain Injury ("TBI") is also referred to as a concussion, a mild traumatic brain injury, or a diffuse axonal injury.²⁶⁷ A TBI occurs when an individual experiences a violent blow to their head or a piercing of the skull.²⁶⁸ All TBIs include some level of bleeding within the brain.²⁶⁹ This bleeding ranges from something similar to bruising, to micro-tears of long nerve fibers, to a bullet ripping through the brain.²⁷⁰ Like strokes, severe TBIs can result in profound symptoms consistent with the most damaged brain regions.²⁷¹ For instance, a gunshot wound that primarily damages the occipital lobe (the back of the head) may result in a type of blindness because this brain region is involved in visual processing.²⁷² Among individuals who have sustained milder TBIs—memory and concentration difficulties are the most common

265. *Id.*

266. See Serge Przedborski et al., *Series Introduction: Neurodegeneration: What is it and where are we?*, 110 J. CLINICAL INVESTIGATION 3, 5 (2003).

267. Shively, Sharon et al., *Dementia Resulting from Traumatic Brain Injury: What is the Pathology?*, 69 ARCHIVES OF NEUROLOGY 1245, 1245 (2012).

268. *Traumatic Brain Injury*, JOHNS HOPKINS MED., <https://www.hopkinsmedicine.org/health/conditions-and-diseases/traumatic-brain-injury> (last visited Sept. 28, 2020).

269. *Id.*

270. Ann C. McKee & Daniel H. Daneshvar, *The Neuropathology of Traumatic Brain Injury*, 127 HANDBOOK OF CLINICAL NEUROLOGY 45, 47 (2015) [hereinafter McKee].

271. *Traumatic Brain Injury*, MAYFIELD CLINIC, <https://mayfieldclinic.com/pe-tbi.htm> (last visited Sept. 28, 2020).

272. *Traumatic Brain Injury: Hope Through Research*, NAT'L INST. OF NEUROLOGICAL DISORDERS & STROKE, <https://www.ninds.nih.gov/Disorders/Patient-Caregiver-Education/Hope-Through-Research/Traumatic-Brain-Injury-Hope-Through> (last modified Apr. 24, 2020).

cognitive domains affected.²⁷³ Sensory sensitivities, such as quickly feeling overwhelmed by sounds, light, or erratic movements, are also common.²⁷⁴ Changes in mood frequently occur after a TBI.²⁷⁵ These changes commonly involve irritability, emotional lability (i.e., quickness to anger), and depressed mood.²⁷⁶ Because brain injuries damage brain tissue, these individuals can also develop seizures that further limit their functional abilities.

b. Intellectual Disability

Symptoms of an Intellectual Disability (“ID”) are seen in a variety of disorders, including Down’s syndrome, autistic disorder, and cerebral palsy.²⁷⁷ Intellectual disabilities are also more common among those with more severe seizure disorders.²⁷⁸ Intellectual disabilities are present from birth, and one of the criteria for this diagnosis is that the individual’s deficit must have been recognized in some manner before the age of eighteen.²⁷⁹ The first of two core deficits that characterize ID include very low intelligence, which is defined as the ability to acquire and apply knowledge. These abilities are commonly measured with an IQ test.²⁸⁰ Second, individuals with ID must also have deficits within

273. Nilkantha Sen, *An Insight into the Vision Impairment Following Traumatic Brain Injury*, 111 *NEUROCHEMISTRY INT’L* 103, 103–07 (2017).

274. Wesley R. Cole & Jason M. Bailie, *Neurocognitive and Psychiatric Symptoms following Mild Traumatic Brain Injury*, *TRANSLATIONAL RES. IN TRAUMATIC BRAIN INJ.* (D. Laskowitz & G. Grant, eds., 2016) [hereinafter Cole]; Glenn R Wylie & Laura A Flashman, *Understanding the Interplay Between Mild Traumatic Brain Injury and Cognitive Fatigue: Models and Treatments*, 2 *CONCUSSION* 1 (2017).

275. Cole, *supra* note 274; *Traumatic Brain Injury*, MAYO CLINIC, <https://www.mayoclinic.org/diseases-conditions/traumatic-brain-injury/symptoms-causes/syc-20378557> (last visited Sept. 28, 2020) [hereinafter *Traumatic Brain Injury*]; Jonathan E. Elliot et al., *Sleep Disturbance in Traumatic Brain Injury: Associations With Sensory Sensitivity*, 14 *J. CLINICAL SLEEP MED.* 1177, 1179 (2018).

276. McKee, *supra* note 270.

277. *Id.*

278. A. S. Eisenhower, et al., *Preschool Children with Intellectual Disability: Syndrome Specificity, Behaviour Problems, and Maternal Well-Being*, 49 *J. INTELLECTUAL DISABILITY RES.* 657, 567–71 (2005); *Facts About Developmental Disabilities*, *CTRS. FOR DISEASE CONTROL & PREVENTION*, <https://www.cdc.gov/ncbddd/developmentaldisabilities/facts.html> (last visited Sept. 28, 2020).

279. See, e.g., Dave Branford et al., *Epilepsy in Adults with Learning Disabilities*, 7 *SEIZURE* 473, 473 (1998), [https://www.seizure-journal.com/article/S1059-1311\(98\)80005-8/pdf](https://www.seizure-journal.com/article/S1059-1311(98)80005-8/pdf).

280. ROBERT L. SCHALOCK ET AL., *AM. ASS’N ON INTELLECTUAL & DEVELOPMENTAL DISABILITIES, INTELLECTUAL DISABILITY: DEFINITION, CLASSIFICATION, AND SYSTEMS OF SUPPORTS* 1 (11th ed. 2010) [hereinafter

the domain of adaptive functioning, which may include the inability to coordinate daily living activities involving self-care, managing finances, protecting self from harm, and so on.²⁸¹ There are various degrees of ID which vary from profound impairment, where an individual may require assistance with eating and using a toilet, to higher functioning individuals who can thrive in settings with modest levels of monitoring and assistance.²⁸²

c. Autism

The most outwardly apparent characteristic of autistic disorder is social awkwardness that limits these individuals from interacting effectively with those around them.²⁸³ This social awkwardness stems from an inability to “read” the metaphorical “temperature” of the room.²⁸⁴ In clinical terminology, autistic individuals lack awareness of the subtle nonverbal “hints” of the people around them. Limited eye contact and difficulties with the “back and forth” nature of the conversation, referred to as reciprocal social interactions, also stand out to the casual observer.²⁸⁵

The second general category of impairment involves becoming fixated on a limited number of topics. This fixation precludes pivoting to topics of conversation that are relevant to others.²⁸⁶ Lastly, individuals suffering from an autism spectrum disorder are easily overstimulated in situations that are noisy or chaotic, causing them to become overwhelmed.²⁸⁷ At times, the degrees of distress and overwhelm will precipitate a behavioral outburst that is qualitatively different from a “temper tantrum.”

As implied by the word “spectrum,” autism severity ranges from mild to severe.²⁸⁸ With increasing severity comes decreased ability to

SCHALOCK]; see also Marc J. Tassé et al., *The Relation Between Intellectual Functioning and Adaptive Behavior in the Diagnosis of Intellectual Disability*, 54 *INTELL. & DEVELOPMENTAL DISABILITIES* 381, 381–383 (2016) [hereinafter Tassé].

281. SCHALOCK, *supra* note 280, at 15; Tassé *supra* note 280, at 382.

282. SCHALOCK, *supra* note 280, at 15; Tassé *supra* note 280, at 382–83.

283. AM. PSYCHIATRIC ASS'N, *supra* note 34.

284. *Id.*

285. *Id.*

286. *Id.*

287. *Id.*

288. *Id.*

communicate, decreased interest in interacting with others, and decreased cognitive flexibility.²⁸⁹ All of these symptoms impede the individual's meaningful engagement with their attorney or the ability to value matters that will greatly affect them when these matters do not align with their limited set of interests.²⁹⁰

3. COGNITIVE DISORDERS WITH A VARIABLE COURSE

Some disorders also vary in intensity over time. This waxing and waning pattern of impairment adds unpredictability to the process of working with these individuals. Consultation with medical professionals and family members can help identify periods of lucidity that may allow for meaningful participation with counsel. The most common disorder that varies over time is delirium.

a. Delirium

Delirium is diagnosed when a rapid or acute change in cognitive abilities occurs over a few hours or days, which is caused by some other medical condition.²⁹¹ Delirium also remits or ceases once the underlying medical condition is treated.²⁹² Medical conditions causing delirium include exacerbations of a chronic illness, medication changes, withdrawal from an addictive drug, or widespread bacterial infection.²⁹³ Generally speaking, delirium stems from a change in the metabolic balance within the body caused by a buildup of waste or a decrease in available blood sugar.²⁹⁴ For instance, among the elderly, it is common for urinary tract infections to spread throughout the body in a condition

289. *Id.*

290. *Id.*

291. COMM. TO EVALUATE THE SUPPLEMENTAL SECURITY INCOME DISABILITY PROGRAM FOR CHILDREN WITH MENTAL DISORDERS, MENTAL DISORDER & DISABILITIES AMONG LOW-INCOME CHILDREN 125, 169 (Thomas F. Boat & Joel T. Wu, eds., 2015), https://www.ncbi.nlm.nih.gov/books/NBK332882/pdf/Bookshelf_NBK332882.pdf.

292. *Delirium*, MAYO CLINIC, <https://www.mayoclinic.org/diseases-conditions/delirium/symptoms-causes/syc-20371386> (last visited Sept. 28, 2020) [hereinafter *Delirium*]; Ondria C. Gleason, *Delirium*, AM. FAM. PHYSICIAN (Mar. 1, 2003), <https://www.aafp.org/afp/2003/0301/p1027.html>.

293. *Delirium*, *supra* note 292.

294. *Id.*

called sepsis.²⁹⁵ After receiving a day or two of intravenous antibiotics, however, the infection comes under control and the body can once again eliminate this extra waste.²⁹⁶ In short, once the metabolic imbalance is remedied, the delirium abates and there is a remarkable recovery of ability.²⁹⁷

Symptoms of severe delirium include minimal awareness of anything happening around the patient, including loved ones speaking to them.²⁹⁸ In less severe cases, delirious individuals may have difficulty with memory, decision-making, and language. Behavioral and emotional changes such as hallucinations, agitation, lethargy, anxiety, and paranoia may also occur in a state of delirium.²⁹⁹ Attorneys will rarely meet with someone suffering from acute delirium, as hospitalization is always necessary.³⁰⁰ Yet, when reviewing hospital records, delirium is a commonly referenced diagnosis.

4. EMOTIONAL DISORDERS WITH A VARIABLE COURSE

Emotional disorders, also referred to as psychological disorders or psychiatric disorders, can emerge at any time throughout an individual's lifespan and tend to wax and wane over time.³⁰¹ These disorders are commonly diagnosed and treated by mental health practitioners, including psychologists, neuropsychologists, and psychiatrists.³⁰² Sev-

295. Mervyn Singer et al., *The Third International Consensus Definitions for Sepsis and Septic Shock (Sepsis-3)*, J. AM. MED. ASS'N (2016), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4968574/>.

296. Stephen Y. Liang, *Sepsis and Other Infectious Disease Emergencies in the Elderly*, 34 EMERGENCY MED. CLINICS N. AM. 501, 512 (2016); U Yamada et al., *Delirium could be an indicator of sepsis in patients under 65 years old with urinary tract infections*, CRITICAL CARE (2012), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3363754/#:~:text=Among%20UTI%20patients%2C%20sepsis%20may,marker%20for%20complication%20of%20sepsis.>

297. *Id.*

298. *Id.*

299. *Delirium*, *supra* note 292.

300. *Id.*; see generally Yvonne A. Johansson et al., *Delirium in older hospitalized patients—signs and actions: a retrospective patient record review*, 18 BMC GERIATRICS 43 (2018).

301. Hans-Ulrich Wittchen et al., *The Waxing and Waning of Mental Disorders: Evaluating the Stability of Syndromes of Mental Disorders in the Population*, 41 COMPREHENSIVE PSYCHIATRY 122, 122 (2000).

302. *Mental Illness*, MAYO CLINIC, <https://www.mayoclinic.org/diseases-conditions/mental-illness/diagnosis-treatment/drc-20374974#:~:text=Psychiatrist%2C%20a%20medical%20doctor%20who,Pharmacist> (last visited Sep. 28, 2020) [hereinafter *Mental Illness*].

eral master's level clinicians such as social workers, licensed professional counselors, and licensed marital and family therapists also commonly provide psychotherapy (i.e., talk therapy or counseling) to treat emotional disorders. The number of emotional disorders that individuals can experience are too numerous to discuss in this Article, so common disorders that impact competence are outlined below. These diagnoses can be broken up into mood disorders, thought disorders, and anxiety disorders.

a. Mood Disorders

Mood broadly refers to happiness and sadness.³⁰³ Major depressive disorder is the most commonly seen mood disorder and is characterized by sadness, lack of motivation, helplessness, and a lack of hope for the future.³⁰⁴ The second type of mood disorder is bipolar disorder, formerly referred to as manic depression.³⁰⁵ In bipolar disorder, sufferers alternate between extended periods (multiple weeks or more) of depression and extended periods of mania.³⁰⁶ Mania refers to an unrealistically high level of energy, decreased need for sleep, and racing thoughts, which are notably different from anxious thoughts.³⁰⁷ When mania becomes particularly severe, psychosis can emerge.³⁰⁸ The core features of mood disorders are emotional; however, each disorder is also associated with cognitive changes of their own.³⁰⁹ Among individuals with pre-existing or emerging cognitive problems, emotional disorders will exacerbate the intensity of the cognitive disorder.³¹⁰

Beyond exacerbating cognitive decline, depression also alters people's perception of the future. Because unrealistically intense feelings of hopelessness and helplessness are core features of depression, these in-

303. See generally Paul Thagard, *What are Moods?*, PSYCH. TODAY (May 23, 2018) <https://www.psychologytoday.com/us/blog/hot-thought/201805/what-are-moods>.

304. Mental Illness, *supra* note 302.

305. *Id.*

306. *Id.*

307. *Id.*

308. *Psychotic Disorders*, MEDLINEPLUS, <https://medlineplus.gov/psychoticdisorders.html> (last visited Sept. 28, 2020).

309. See Cherie L. Marvel & Sergio Paradiso, *Cognitive and neurological impairment in mood disorders*, 27 PSYCHIATRIC CLINICS N. AM. 19, 19 (2004).

310. Laura D. Crocker et al., *Relationships among cognition, emotion, and motivation: implications for intervention and neuroplasticity in psychopathology*, 7 FRONTIERS HUMAN NEUROSCIENCE 1 (2013).

dividuals may lack the ability to see beyond what they feel is the inevitability of failure. In the most severe situations, envisioning suicide may motivate the disposal of one's assets. In less severe instances, a foreshortened sense of the future may more subtly influence decision-making.

Similarly, in mania, an unrealistically optimistic view of the world, a sense of invincibility and tendency to dismiss legitimately bad news can also alter judgment. When concerns arise surrounding the possibility of suicide, transfer to a hospital emergency department is the only viable option. In less urgent circumstances, referral to a psychiatrist or psychologist is an option for further assessment of mood disorders.

b. Anxiety Disorders

Anxiety, also known as generalized anxiety disorder or social anxiety disorder, refers to feelings of apprehension, unease, fear, nervousness, or a sense of impending doom.³¹¹ These feelings are intense enough that they cause a level of preoccupation that limits the ability to function in the world.³¹² While suffering solely from an anxiety disorder is relatively unlikely to result in incompetence, it remains an important factor for practitioners to consider.³¹³ Essentially, the presence of anxiety amplifies the cognitive difficulties that are experienced.³¹⁴ For instance, anxious individuals who also have mildly limited abilities to understand what their financial planner is discussing may prematurely "shut down" during these discussions because they become overwhelmed and give up. Alternately, among individuals with limited mobility, anxiety may fuel dependence on a family member, creating an opportunity for undue influence or abuse.³¹⁵

311. *Mental Illness*, *supra* note 302.

312. *Id.*

313. Kathleen Smith, *Facing the fear of incompetence*, COUNSELING TODAY (Mar. 29, 2017), <https://ct.counseling.org/2017/03/facing-fear-incompetence/>.

314. *Id.*

315. See Marson et al., *supra* note 46, at 71–73.

c. Post-Traumatic Stress Disorder

Post-traumatic stress disorder (“PTSD”) is similar to an anxiety disorder but is caused by an unusually severe trauma.³¹⁶ Symptoms include fear, sadness, jumpiness, and intense avoidance of situations that are reminiscent of past traumas. In the context of PTSD, trauma refers to exposure to a threatened or experienced life-threatening or sexually assaultive event.³¹⁷ PTSD can also cause irritability, anger, or extreme emotional volatility.³¹⁸ Notably, individuals who have managed the symptoms of their PTSD well throughout life, but whose overall brain functioning is in decline due to a dementing process, may begin to experience flashbacks or intrusive reexperiences, as well as a level of fear that seems uncharacteristic to those who know them well.³¹⁹

d. Thought Disorders

Thought disorders are relatively uncommon but can be tremendously debilitating. Disorders within this category include schizophrenia, schizoaffective disorder, and more severe cases of bipolar disorder.³²⁰ Individuals with thought disorders may suffer from psychotic episodes in which they experience hallucinations and become confused, illogical, lethargic, disoriented, and withdrawn.³²¹ Psychotic individuals can also suffer from firmly held but profoundly irrational beliefs, called delusions. These distorted belief systems can make working with individuals suffering from psychosis a uniquely challenging prospect.

Because individuals who suffer from delusional beliefs can hold onto these beliefs steadfastly, and because psychotic individuals often misperceive events around them, they create significant challenges for the practitioner. Unlike milder symptoms of anxiety, which patient practitioners can generally work with, individuals with psychosis will require professional help. Because medications are the primary treatment for psychosis, practitioners are advised to facilitate a psychiatric evaluation to evaluate the need for medications. Because the primary

316. *Mental Illness*, *supra* note 302.

317. *Post-traumatic stress disorder (PTSD)*, MAYO CLINIC, <https://www.mayoclinic.org/diseases-conditions/post-traumatic-stress-disorder/symptoms-causes/syc-20355967> (last visited Sept. 28, 2020).

318. *Id.*

319. *Id.*

320. Aimee Eyvazzadeh, *What is a Thought Disorder?*, HEALTHLINE (Mar. 5, 2020), <https://www.healthline.com/health/thought-disorder>.

321. *Id.*

purpose of seeing a psychiatrist is to facilitate medical stabilization (i.e., not forensic assessment), it would be entirely appropriate for these treatment providers to bill medical insurance for their services.

5. PSEUDODEMENTIA

Pseudodementia exists at the confluence of what is neurological and what is psychological.³²² Pseudodementia is not a formal diagnosis recognized by the DSM-5 or ICD-10, but the existence of this constellation of symptoms is well-supported by the literature.³²³ Examinees suffering from pseudodementia appear on the surface to have cognitive challenges such as poor memory or confusion.³²⁴ Still, a mood-related disorder such as depression, rather than the kind of brain atrophy seen among those with dementia, is the culprit.³²⁵ While it is tricky to differentiate pseudodementia from true dementia when only looking at cognitive challenges, clinicians who assess both cognition and depression can generally identify the source.³²⁶ Additionally, those suffering from pseudodementia are commonly more bothered by their lapses in memory and can more readily remember moments when their memory has failed them.³²⁷ This is distinct from what is seen among those with dementia who tend to deny memory issues because they do not recognize them.³²⁸

VIII. Admissibility

In most states, the *Daubert*³²⁹ standard has superseded the *Frye*³³⁰ test. In *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, the United States Supreme Court found that the *Frye* standard was improper under the Federal Rules of Evidence because “general acceptance” does not meet the criteria of “relevance and reliability” as outlined in Rule 702.³³¹ Further, Rule 702 reads:

322. See Hai Kang et al., *Pseudo-dementia: A neuropsychological review*, 17 ANNALS INDIAN ACAD. NEUROLOGY 147, 147 (2014) <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4090838/>.

323. See *id.*

324. See *id.*

325. See *id.*

326. See *id.*

327. See *id.*

328. See *id.*

329. *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993).

330. *Frye v. United States*, 293 F. 1013 (D.C. Cir. 1923).

331. *Daubert*, 509 U.S. at 589.

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise.³³²

In *Daubert*, the Court emphasized the importance of a trial judge's evidentiary "gatekeeping responsibility" when assessing the methodology underlying that expert's testimony. These considerations include:

- whether the expert's technique or theory can be tested and assessed for reliability;
- whether the technique or theory has been subject to peer review and publication;
- the known or potential rate of error of the technique or theory;
- the existence and maintenance of standards and controls; and
- whether the technique or theory has been generally accepted in the scientific community.

As mentioned earlier in this article, neuropsychologists have the luxury of relying more on objective data and less on pure clinical judgment when opining on legal matters.³³³ Reliability and validity are complicated scientific concepts, but the legal practitioner is well advised to develop some familiarity with them because they directly relate to admissibility standards. To demonstrate how data collected during neuropsychological evaluations meet evidentiary admissibility criteria, the remainder of this Section will outline individual components of neuropsychological test development and administration that satisfy the five criteria elucidated in the *Daubert* decision.

A. Testability and Reliability

1. VALIDITY

Validity, in this context, has a subtly different meaning than was discussed above. In the context of testability and reliability, validity re-

332. FED. R. EVID. 702.

333. See *infra*, Part I.

flects the extent to which abilities measured in various cognitive domains reflect real-life abilities.³³⁴ Multiple types of validity are considered during the development of neuropsychological tests, but there are three types most relevant to attorneys.

The first type of validity relates to how well the test measures what it is intended to. For instance, does an individual's performance on a test of attention correlate with, or maintain consistency with other assessments of attention? A second type of validity considers how successfully a test avoids being "tricked" by unrelated factors. For instance, a test of attention should not also be affected by the individual's ability to read. Last, the degree to which measured abilities on tests can be generalized to real-world functioning is also considered.³³⁵

2. RELIABILITY

Reliability refers to the consistency of measurement. The first consideration is how consistently one test will come up with the same results at different times in a person's life. Second, is the consistency of an examinee's responses among individual, related components of a test. Last, is the consistency of results on a given test when administered by different neuropsychologists.³³⁶

A discussion of the statistics underlying measuring test-retest reliability, criterion validity, and so on is well outside this Article's scope. But practitioners can rest assured they will be able to find an expert to outline these factors for each test given in nauseating detail if desired.

a. Peer Review and Publication

In short, neuropsychological tests are not just assumed to work. Instead, test developers conduct extensive research on how well their tests are working and revise these tests over time.³³⁷ This validation research is then published and subjected to peer review.³³⁸ Tests are then

334. Michael R. Greher & Thomas R. Wodushek, *Performance Validity Testing in Neuropsychology: Scientific Basis and Clinical Application-A Brief Review*, 23 J. PSYCHIATRIC PRACTICE 134, 134-40 (2017).

335. *Id.*

336. *Id.*

337. *Id.*

338. *Id.*

re-validated by multiple researchers at multiple different times in a process that continually advances the field.³³⁹ Over time, new tests are developed which supersede existing tests as they become recognized for their superior reliability and validity.³⁴⁰

b. Error Rates

Sensitivity and specificity are indicators of whether a test is well-validated or not.³⁴¹ Using a memory test as an example, sensitivity reflects how accurately the test can correctly identify, or rule-in, individuals who genuinely have a weak memory.³⁴² On the other hand, specificity relates to the accuracy with which that same test rules-out individuals who genuinely have no memory disorder.³⁴³

c. Standards and Controls

When neuropsychological tests are initially designed, there is a significant focus placed on creating tools that can be consistently administered by the clinicians who will be using them. This focus on consistent administration allows each neuropsychologist to closely approximate the same parameters used during the development of the test when assessing their examinee.³⁴⁴ In practical terms, this means that neuropsychological tests come with a specific set of instructions to teach patients how to perform each test. Because examinees periodically veer off-course during testing, there are also proscribed prompts—that are given under set circumstances—to help the individual get back on track.³⁴⁵ This consistency in administration can become as nitpicky as the number of inches in front of the examinee a certain test is placed.

339. See, e.g., Josiane Pawlowski et al., *A Systematic Review of Validity Procedures Used in Neuropsychological Batteries*, 6 PSYCHOL. & NEUROSCIENCE 311, 322 (2013).

340. Rachel Mahoney et al., *The TE4D-Cog: A New Test for Detecting Early Dementia in English-Speaking Populations*, 20 INT. J. GERIATRIC PSYCHIATRY 1172, 1172–79 (2005).

341. Andrew S. Labarge et al., *Neuropsychologists' Abilities to Determine the Predictive Value of Diagnostic Tests*, 18 ARCHIVES CLINICAL NEUROPSYCHOLOGY 165, 165–66 (2003).

342. *Id.*

343. *Id.* at 166.

344. Glenn Stebbins, *Textbook of Clinical Neurology* 541 (Christopher Goetz ed., 3d ed. 2007).

345. See, e.g., COMM. ON PSYCHOLOGICAL TESTING, PSYCHOLOGICAL TESTING IN THE SERVICE OF DISABILITY DETERMINATION, (2015).

Practically speaking, doing anything within the real-world is limited by the human ability to control every extraneous factor. Fortunately, it is unlikely that someone's performance would be dramatically impacted by having the test placed nine inches versus six inches away.³⁴⁶ Still, more significant deviations from expected test administration do occur. For example, the door in an adjacent room may slam shut, or an overhead announcement may be made during the middle of a test requiring attention. In instances such as these, clinical judgment is exercised to determine whether these deviations from ideal test administration limit the quality of data.³⁴⁷

d. General Acceptance

The *Frye* standard states:

Just when a scientific principle or discovery crosses the line between the experimental and demonstrable stages is difficult to define. Somewhere in this twilight zone, the evidential force of the principle must be recognized. While the courts will go a long way in admitting expert testimony deduced from a well-recognized scientific principle or discovery, the thing from which the deduction is made must be sufficiently established to have gained general acceptance in the particular field in which it belongs.³⁴⁸

General acceptance is such an ethereal concept that it is rather difficult to define or expound upon. Neuropsychological testing is sometimes referred to as the "gold standard" for the assessment of cognitive functioning, but this statement, like general acceptance itself, eludes objective measurement.³⁴⁹ The frequency with which members of the medical community refer to neuropsychologists for diagnostic clarification or to generate appropriate treatment recommendations is certainly one indicator of how neuropsychological testing has become generally accepted and integrated into the broader medical community. Last, federal and private insurers deem neuropsychological testing medically

346. *Cf. id.* (discussing the level of standardization needed between various neuropsychological assessments).

347. See Michael Chafetz, *Official Position of the American Academy of Clinical Neuropsychology Social Security Administration Policy on Validity Testing: Guidance and Recommendations for Change*, 29 *CLINICAL NEUROPSYCHOLOGIST* 723, 735 (2015) (explaining that clinical judgment can be inadequate in determining test scores).

348. See *Frye*, 293 F. at 1014.

349. Philip D. Harvey, *Clinical Applications of Neuropsychological Assessment*, *DIALOGUES CLINICAL NEUROSCIENCE* 91, 96 (2012).

necessary in most instances, whereas they would not if there was insufficient research to support the value of these procedures.³⁵⁰

IX. Bridging the Gap Between Competence and Capacity

If neuropsychology involves describing gray areas, what use does it have in a legal context that requires a clear distinction? The utility of neuropsychological testing stems from the ability to consider how multiple subcomponents interact to allow or limit an individual's ability to meet a legal standard. To demonstrate how neuropsychological domains track onto the components of a given legal standard, the example of testamentary capacity will be used. First, the legal standard for testamentary capacity will be reviewed, followed by an outline of the universal and testamentary-specific abilities that are thought to underlie each legal standard.

A. The Example of Testamentary Capacity

Eric Mart, PhD, ABPP, and Alan Alban, PhD, JD,³⁵¹ distilled the essential elements of the *Banks v. Goodfellow*³⁵² decision, which forms the basis of testamentary capacity standards throughout the United States as follows:

1. Does the testator understand the nature of the act of making a will? Put simply; this means that the individual making the will understands that a document that will direct the distribution of his or her property after death is being created. This does not mean that they must understand case law regarding inheritance on the same level as a lawyer, but they must have a general idea of what they are doing.³⁵³
2. Does the testator understand his or her property? Again, this does not imply that the testator must be able to provide a detailed accounting of each element of his or her property. Instead, an accurate estimate of finances and property will suffice. It is perfectly appropriate for documents to be consulted

350. See, e.g., AETNA, Neuropsychological and Psychological Testing (Feb. 13, 2020), http://www.aetna.com/cpb/medical/data/100_199/0158.html (describing the circumstances under which neuropsychological assessments are considered medically necessary).

351. Eric G. Mart & Adam D. Alban, *The Practical Assessment of Testamentary Capacity and Undue Influence in the Elderly* (2011).

352. *Banks v. Goodfellow* (1870) 5 L.R. QB 549 (Eng.).

353. Eric G. Mart, *Neuropsychological Assessment of Testamentary Capacity and Undue Influence*, 31 ARCHIVES CLINICAL NEUROLOGY 554, 555 (2016).

- or for the attorney assisting in the creation of the will to prompt the testator regarding these matters.³⁵⁴
3. Does the testator know the natural objects of his or her bounty? The natural objects of one's bounty refer to the people, usually family members, to whom one would generally be expected to benefit in a will, all things being equal, such as brothers and sisters, children, and grandchildren. There is no requirement that the testator leaves their belongings to these individuals, and he or she can refrain from doing so for any reason unless the decision is informed by what has been termed an "insane delusion."³⁵⁵
 4. Does the testator understand how the will disposes of his or her property? This element requires that there be a correspondence between the testator's general intentions for the distribution of his or her assets after death and the way the distribution will occur given the way the will is written. For example, a testator could be asked what his intentions are regarding the distribution of his property, and he might state that he wishes equal shares of his estate to be distributed to his three sons. If a review of the actual will shows that one of the sons has been disinherited, the testator could not be considered to understand how the will disposes that estate.³⁵⁶

B. Universal Abilities

The domains of orientation (i.e., alertness or awareness) and attention (i.e., ability to focus and resist distraction) represent the cognitive "foundation" on top of which all other cognitive abilities rest.³⁵⁷ Said another way, if an individual is sleepy, they will not understand conversations (i.e., receptive language) with their attorney.³⁵⁸ Relatedly, when individuals are disoriented and confused about the overall circumstances, they could not be expected to meaningfully interpret visual information, such as the various charts and graphs that are commonly included in mutual fund reports.

If an individual is oriented, alert, and aware of their surroundings, the next cognitive ability that comes into play is attention. Like the above, if an individual's focus on the task is frequently taken away by

354. *Id.*

355. *Id.*

356. *Id.*

357. Philip D. Harvey, *Domains of Cognition and Their Assessment*, 21 *DIALOGUES CLINICAL NEUROSCIENCE* 227, 228 (2019).

358. *See id.*

typical office sounds, their participation will be limited.³⁵⁹ Often, decisions a client needs to make will require comparing or contrasting two separate pieces of paper, such as a list of assets and a worksheet outlining which assets will be earmarked for different heirs.³⁶⁰ When comparing and contrasting separate pieces of information, an individual needs to divide their attention between the two different sheets of paper.³⁶¹ In this way, individuals whose divided attention abilities are limited will be at a significant disadvantage.

If orientation and attention form the bedrock upon which all other abilities sit, language and communication represent the final link in the chain that allows the individual to convey their preferences to those around them. For instance, individuals who have had a stroke sometimes lose the ability to speak clearly, but can sometimes write or type, providing a convenient workaround.³⁶² In situations where language abilities are more impaired, it often makes sense to consult with a speech-language pathologist to develop strategies to maximize communication ability.

C. Testamentary-Specific Abilities

In addition to the above domains which are necessary to fulfill all legal standards, abilities within specific domains are uniquely necessary to satisfy the individual components of each legal standard. Again, using the example of testamentary capacity, consider the following scenarios.³⁶³

1. UNDERSTANDING THE NATURE OF THE ACT OF MAKING A WILL

Understanding a legal instrument requires a level of intellectual functioning that allows an individual to comprehend the concept of a will.³⁶⁴ Further, the testator must recognize the decisions made come

359. *Id.*

360. Cf. Sarah Fraser & Louis Bherer, *Age-Related Decline in Divided-Attention: From Theoretical Lab Research to Practical Real-Life Situations*, 4 WILEY INTERDISCIPLINARY REVS.: COGNITIVE (2013) (explaining the impact of divided attention on seniors' cognitive abilities).

361. *Id.*

362. See generally *Communication problems after stroke*, STROKE ASS'N, (April 2012), <https://www.stroke.org.uk/sites/default/files/Communication%20problems%20after%20stroke.pdf>.

363. Marson et al., *supra* note 46, at 88.

364. See *id.*

into play after one's demise, and that directing your assets as you see fit is desirable.³⁶⁵ A greater level of intellectual ability is necessary to recognize that putting one's assets into a trust is beneficial in terms of tax laws, but also limits immediate control of these assets once they are in trust.³⁶⁶

2. UNDERSTANDING THE EXTENT OF ONE'S PROPERTY

Understanding one's assets involves memory for choices made in the distant past as well as decisions made more recently.³⁶⁷ The value of memory is also implicated in recalling how a poorly cared-for home may have depreciated. Because no individual is expected to remember all of these different factors spontaneously, practitioners regularly remind clients of their assets, so they can make informed decisions.

3. KNOWLEDGE OF THE NATURAL OBJECTS OF ONE'S BOUNTY

The most heartbreaking example is that of individuals who cannot readily recognize the remaining members of their family, and could neither tolerate a neuropsychological evaluation nor would there be many questions about their competence. When memory is sufficient to recognize these individuals, deductive reasoning, a concept that falls under the broader category of executive functioning, comes into play.³⁶⁸

4. DISPOSAL OF ONE'S PROPERTY

The fourth standard requires the testator to integrate all of the first three elements into a plan that demonstrates some level of forethought into the likely outcome of decisions made, and in which previously made decisions can coexist without conflict.³⁶⁹ Beyond having sufficiently intact memory to recall decisions that have already been made, this standard necessitates some ability to plan, organize, and anticipate future possibilities.³⁷⁰ Attorneys are well accustomed to helping their clients recognize unanticipated consequences of decisions made at the moment, so clients certainly do not need the ability to do this independently. Still, the client needs to have sufficient executive functioning

365. *See id.*

366. *Id.*

367. *Id.*

368. *Id.*

369. *Id.*

370. *Id.*

to allow them to juggle competing options and compromise when necessary.³⁷¹ For instance, the executive process of reasoning through your intention to care for the families of both of your children becomes more complicated when taking into account the fact that your son has three younger children, whereas your daughter has one adult child who is a self-sufficient adult.

X. Neuroimaging

Neuroimaging has become an indispensable tool for the diagnosis of brain dysfunction. While some of the more sophisticated brain imaging modalities are finding their way into clinical practice, legal practitioners are most likely to encounter just two types. These include computed tomography (“CT”) and magnetic resonance imaging (“MRI”).³⁷² Both modalities result in a three-dimensional picture of the structure or shape of the brain.³⁷³ Generally speaking, CT can be performed rapidly, so it might be used when in a hospital emergency department to identify bleeding or hemorrhaging in a suspected stroke patient.³⁷⁴ MRIs are higher resolution and might be used when there are questions about the degree of brain atrophy in order to identify a tumor’s location or longstanding structural abnormality.³⁷⁵

If brain imaging is such a powerful tool that gives us a direct view of the organ responsible for competence, why does it play such a minor role in competency determinations? This is because, as useful of a tool as it is for figuring out the etiology of cognitive decline, there is no direct correlation between brain structure and day-to-day abilities.³⁷⁶ Essentially, brain imaging gives clinicians guidance on how to treat the biological origins of cognitive difficulties, but not how those brain changes impact the ability to manage daily tasks or how to understand the implications of entering into a contract.³⁷⁷

371. *Id.*

372. Gabriella V. Hirsch et al., *Using Structural and Functional Brain Imaging to Uncover How the Brain Adapts to Blindness*, 2 ANNALS NEUROSCIENCE & PSYCHOL. 1, 3 (2015).

373. *Id.*

374. *Id.*

375. *Id.*

376. Cf. C. Scarpazza et al., *The Charm of Structural Neuroimaging in Insanity Evaluations: Guidelines to Avoid Misinterpretation of the Findings*, 8 TRANSLATIONAL PSYCHIATRY 1, 5 (2018) (discussing weaknesses of structural neuroimaging related to determining competency in criminal trials).

377. *Id.*

XI. Topics Not Covered

This Article is intended to provide practitioners with an introduction to neuropsychological testing from a theoretical perspective. In the interest of brevity, this Article has excluded any practical, nuts and bolts recommendations on how to work with neuropsychologists, preparing your client for evaluation, or even getting your client to show up for an evaluation. Future topics that would bridge the gap between theory and practice include:

- signs to look for suggesting diminished capacity;
- when to consult a neuropsychologist;
- preparing a retained neuropsychologist;
- when retaining a controlled expert to explain an existing report is warranted;
- explaining to your client why a neuropsychological evaluation is needed;
- the emotional impact on your client of being adjudicated incompetent;
- the family's role in the assessment process;
- incorporating the client's longstanding personal preferences;
- recognizing and understanding culturally-driven preferences;
- preparing your client for an upcoming evaluation;
- matters related to the cost of the evaluation;
- how cognitive abilities decline over time;
- contemporaneous assessment of competence;
- retrospective assessment of competence;
- sexual consent among those with diminished capacity;
- abilities to drive a motor vehicle;
- undue influence;
- supported decision-making;
- participation in mediation; and
- multidisciplinary competence assessment.

XII. Conclusions

Forensic neuropsychological evaluation directly assesses the individual components of legal competencies in a manner particularly well-suited to the needs of the court. Further, expert opinions based on objective testing that lay out the rationale for their conclusions also promote understanding among all parties. This level of transparency inspires confidence in the impartiality of the opinions rendered and can

ease the emotional process of coming to terms with guardianship decisions for both the disabled and their family.

Beyond offering the ability to make the subtle distinctions that are called for in complex cases, neuropsychological testing is based upon scientific principles that address evidentiary standards. These include valid, reliable, tested procedures that are consistently administered, peer-reviewed, and generally accepted within the scientific community. Unsurprisingly, the testimony which results from these procedures tends to carry a great deal of weight. There are also significant financial costs associated with the time it takes to achieve this level of comprehensiveness, leaving practitioners to decide whether the stakes of the case warrant the expense. But in circumstances where the complexity of the case justifies a neuropsychological evaluation, this form of evaluation offers the finder of fact very definitive information. Neuropsychological evaluations ultimately promote justice by protecting the safety and rights of individuals who may lack the ability to do so themselves.

