

Clinical Neuropsychology in Integrated Rehabilitation Care Teams

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Abstract

Neuropsychologists have been an integral part of rehabilitation-oriented integrated care teams for some time and they provide care that is complimentary to other specialties, such as rehabilitation psychologists. Neuropsychologists are more likely than other specialties to offer objective cognitive data that includes consideration of emotional and behavioral features when assessing patients who have known or suspected brain injury or illness. Objective cognitive data is then often used for treatment and discharge planning as well as anticipating safety issues and impairment of functional skills. Unlike a consultative model, neuropsychologists in rehabilitation must work as part of a team of rehabilitation professionals and understand the contributions each specialty offers patients. This paper will highlight a number of issues pertaining to the practice of neuropsychology in rehabilitation settings including: (i) essential skills and duties, (ii) reimbursement, (iii) practice specifics, (iv) types of recommendations, (v) communication issues, (vi) impact of neuropsychological services, (vii) role satisfaction; (viii) advice for early career neuropsychologists, and (ix) a sample report.

Keywords: Neuropsychological assessment; Cognition, Neuropsychologist; Rehabilitation, Integrated care team

Rationale for Neuropsychologists Being Part of the Rehabilitation Team

Rehabilitation is defined as “to bring [someone] back to normal, healthy condition after an illness, injury.....to live a normal and productive life: to bring [someone] back to a good condition” (Merriam-Webster.com, 2017). Most people are probably aware that Rehabilitation Psychology and Neuropsychology are two psychology specialties recognized by the Commission on Recognition of Specialties and Proficiencies in Professional Psychology (CRSPPP). Neuropsychologists have been entrenched in rehabilitation settings for quite some time, and authoritative papers have been written about their role and contribution to patients with rehabilitation needs ([Novack, Sherer, & Penna, 2010](#)). As a starting point it is worth trying to compare and contrast the two specialties.

What separates neuropsychology from rehabilitation psychology is a matter for debate. Both specialties tend to claim certain patient populations as their own. For example, rehabilitation psychology tends to claim patients with orthopedic issues and amputation, spinal cord injuries, and burn injuries, among others. Neuropsychologists tend to claim degenerative neurological disorders as their signature patient population. There are a number of medical conditions where there is an undeniable overlap. Specifically, when a patient has both rehabilitation and cognitive issues there tends to be more confusion about the best specialty to provide care, such as persons who have suffered stroke or traumatic brain injury. Other considerations relating to the specialty debate include the level of acuity, the need for ongoing treatment such as psychotherapy or cognitive remediation, and the model of interaction with other providers (i.e., consultative versus team approaches). While offering generalizations would not accurately characterize all providers, neuropsychologists are more likely to provide care to those without acute medical issues, tend to primarily assess as opposed to providing interventional services, and tend to work within a consultative model of care as opposed to working from within a team-oriented approach. Nonetheless, there are some neuropsychologists who are comfortable with the rehabilitation milieu and have competence in rehabilitation. Conversely, there are

some rehabilitation psychologists who are adept at cognitive assessment. So it would be incorrect to assume that the two specialties are interchangeable as it relates to the rehabilitation setting, and also incorrect to assume that all providers are working comfortably within their domains of competence.

There are many reasons for neuropsychologists to be involved in rehabilitation settings. First, in terms of caring for patients with brain-related disorders, neuropsychologists are well equipped to provide valuable input regarding the behavioral, cognitive, and emotional difficulties that are frequently encountered by this population. This input can be important in terms of understanding barriers to participation in rehabilitation, educating the patient and his or her family, and in assisting with treatment planning and discharge considerations. Secondly, there is a significant difference between cursory cognitive screening and neuropsychological assessment by a neuropsychologist knowledgeable about brain-behavior relationships and trained to incorporate contextual data from multiple domains as part of their interpretation. As reported by Block et al. “at present the measurement of cognition is considered part of the scope of practice by numerous educational and healthcare specialties” (Block, Johnson-Greene, Pliskin, & Boake, 2017). There is a tendency in rehabilitation settings to have rather cursory cognitive screens by non-neuropsychologists, which may not be an appropriate standard of care for patients with known or suspected brain-related illness or injury. Despite greater recognition of the importance of objective cognitive data, there remains a general acceptance of non-objective cognitive data in rehabilitation settings. Unvalidated observations and “hunches” are not part of the average neuropsychologist’s practice, but are commonplace in rehabilitation settings among some psychologist and non-psychologist providers. Neuropsychologists are more likely than other specialties to make recommendations based on objective data.

Though it is clear that neuropsychological consultation is utilized in the rehabilitation setting (Bishop, Temple, Rtrement, Westervelt, & Stern, 2003), there is scant data concerning empirical support for neuropsychology (or any psychological service) in rehabilitation populations (Prigatano & Pliskin, 2003). Certainly the incidence of brain injury and illness strongly implies the need for persons who specialize in neuropsychological principles and practice. Populations that have shown benefit from neuropsychological services include traumatic brain injury (Kalmar et al., 2008; Soble, Critchfield, & Rourke, 2017; Temple et al., 2009), and stroke (Rasquin, Welter, & van Heugten, 2013; Wolf & Rogstad, 2013). There have also been papers outlining the role of neuropsychology on brain injury teams (Barry & O’Leary, 1989). When neuropsychology is not mentioned specifically by name, papers nonetheless stress the recommendation that “individuals have detailed assessment of cognition...” (Bayley et al., 2014).

Cognitive remediation is a treatment intervention often offered by neuropsychologists and can assist individuals in finding ways to compensate for cognitive issues following brain injury (Cicerone et al., 2005), though empirical support for this intervention is sometimes lacking. Neuropsychological assessment has also shown utility as a predictor of many different functional skills ranging from driving (Coleman et al., 2002), return to work (Sherer et al., 2002), decisional and financial capacity (Marson et al., 2005; Marson, Chatterjee, Ingram, & Harrell, 1996), and social integration (Hanks, Rapport, Millis, & Deshpande, 1999). A summary of the roles and activities of neuropsychologists in rehabilitation settings is presented in Table 1.

Table 1. Domains and activities of neuropsychologists in rehabilitation settings

| Domains | Activities |
|--------------------|--|
| Assessment | <ul style="list-style-type: none"> • Behavioral • Cognitive • Emotional |
| Treatment Planning | <ul style="list-style-type: none"> • Identification of treatment barriers • Advising rehabilitation team |
| Intervention | <ul style="list-style-type: none"> • Behavioral Interventions • Cognitive Remediation • Rehabilitation Team Consultation |
| Education | <ul style="list-style-type: none"> • Patient • Caregivers and Family • Treatment Team |
| Discharge Planning | <ul style="list-style-type: none"> • Identify barriers to discharge • Address specific areas of concern <ul style="list-style-type: none"> • Supervision needs and ability to live independently • Driving ability • Employment considerations • Ability to manage finances • Vocational and educational needs |

Essential Skills and Specific Competencies

As previously described, neuropsychologists excel at being able to describe brain-behavior relationships, which includes an understanding of behavioral, cognitive, and emotional difficulties associated with brain injury and illness.

First, an understanding of functional neuroanatomy and the limitation of radiographic imaging is important for the populations served by neuropsychologists in rehabilitation settings. Because premorbid and co-occurring neurological illness can be present in some patients, there can be diagnostic confusion even though the manifest reason for hospital admission may be a stroke or traumatic brain injury. Having an understanding of neurological disorders and how they present is important to understanding the unique needs of a given patient. It is actually not uncommon for a patient with new onset stroke to have a premorbid dementia that led to them being non-adherent with their antihypertensive medication, and they are now on the rehabilitation unit with memory impairment that is far greater than expected based on the severity of the stroke. Such a finding would have important implications for the patient's future efforts to maintain medication adherence and comply with stroke prevention strategies.

Secondly, a knowledge of psychometrics and test validity is important as it relates to the many life domains that neuropsychologists are asked to provide input. For example, the treatment team and family members may look to the neuropsychologist as the primary determinant of whether a patient should resume driving or can manage their finances independently. These are significant recommendations that have life-altering effects for those we assess, and thus need to be well supported by objective data.

Third, it is important to have an understanding of how rehabilitation teams work and the unique contributions of other rehabilitation specialties, such as physical therapy, speech-language pathology, and occupational therapy. The adept neuropsychologist will spend time on a daily basis with these other specialties in team meetings and in therapy sessions and have an excellent working alliance with other providers. Having an understanding of their approach to assessment and treatment is important to be able to advise them on how to work optimally with specific patients.

Lastly, rehabilitation environments can be a stressful place to work that easily promotes misunderstandings among professionals. Being able to effectively communicate and resolve conflicts within the rehabilitation team and between the team and family members is a recurring skill set that is put to good use. It is surprising how often adversarial interactions develop, and being skilled at resolving conflict and mediating communications between team members and between team and family members is often utilized. Family dysfunction that may have always been present can become much more problematic after a medical event, and team members may unknowingly contribute to misunderstandings through suboptimal communication or an abrasive interpersonal style in this fast-paced environment.

Roadmap to Integration/Reimbursement

When it comes to reimbursement one important factor to consider is that those who work in rehabilitation settings seldom use psychometricians for completion of testing. There is a belief that familiarity with the patient requires first-hand knowledge, which means spending time with the patient. The rehabilitation team will work directly with the patient, and there is a lack of credibility given to those who do not operate within this mindset. With the absence of psychometricians comes a higher reimbursement, though fewer patients are ultimately seen.

Because many of the aforementioned roles and activities of the neuropsychologist in a rehabilitation setting are not reimbursable it is advisable to develop a practice model that adequately compensates for unreimbursed time that is nonetheless desired by the hospital. As previously described, there is a clear need for neuropsychologists in rehabilitation settings (Novack et al., 2010). If there is an expectation that the neuropsychologist will attend several hours of team meetings, bedside rounds, and provide staff education, it is important to be certain that these activities are adequately compensated. When employed by the hospital directly that means having an understanding of these activities in terms of their impact on productivity and establishing reasonable relative value unit (RVU) benchmarks. Neuropsychologists with incentive plans often find that the RVU target is set too high to realistically yield incentive pay, especially when associated with the multitude of unreimbursed activities expected of the neuropsychologist.

Other factors that can affect productivity and reimbursement includes the availability of internal support personnel who are available to seek pre-authorizations and to submit bills. The most productive of neuropsychologists cannot obtain remuneration if the hospital does not seek pre-authorizations or never submits bills properly, or at all. Because psychology tends to be a small niche in most rehabilitation programs it is not uncommon for there to have infrastructure problems that inhibit the psychologists from obtain payment for their services. Multiple hospitals where I have been had a routine practice of not seeking pre-authorizations for psychology services, and in some cases, not even submitting bills of any kind on behalf of psychology.

During times of budget constraints institutions may come to view neuropsychology as an expendable and non-essential service because they are not functioning in a revenue neutral manner.

When a neuropsychologist is contractual, it is important to negotiate a specific fixed agreement for the unreimbursed activities. A critical piece of this negotiation is whether you are expected to see patients for services that do not have insurance or see patients for whom the neuropsychologist is not a participating provider for a patient's insurance plan. In one position I had in the past I estimated that I was providing over 100k per year in patient care services that were not being reimbursed, and we were ultimately being reimbursed for only a very small fraction of that amount. The neuropsychologist can easily find themselves without any specific parameters that are part of an omnibus joint operating agreement that includes multiple providers and services. Two points that I think are important to raise with hospital administrators when negotiating these arrangements include: (i) Patients who are in the hospital do not have the option to see any psychologist they want as they would if they were in the community, they are a captive audience; and (ii) It is desirable to have all patients within the hospital to obtain the same level of care, regardless of their insurance status.

Practice Specifics: Setting and Cases Per Week

The number of cases seen per week is often determined by the productivity benchmarks that are negotiated between the provider and their employer. In academic institutions this becomes a difficult issue because in addition to accounting for one's salary and fringe benefits you may be paying for your share of a medical practice as well as other academic costs, such as an exorbitant Dean's tax. The average neuropsychologist in a rehabilitation setting is assigned to a specific unit (e.g., the brain injury unit) and is responsible for providing services to 15–18 patients at a point in time. Depending on productivity benchmarks the neuropsychologist may also have to see a certain number of outpatients per week. On a positive note, patients in the hospital never fail to show up for their appointments and so there is a 0% no-show rate. Depending on the average length of stay providers may be expected to do an initial brief assessment for all new patients in time for the first rehabilitation team meeting (usually within the first few days they are on the unit), and then to provide periodic interventional and consultative services while the patient remains on the inpatient unit. This is often intermixed with seeing outpatients who are discharged from the inpatient unit as well as covering for colleagues during absences on other units. Family meetings, support groups, and educational events are commonplace and may need to occur at off hours to accommodate schedules.

Focus of the Evaluation

The goals of an initial evaluation in a rehabilitation setting are 5-fold: (i) identification of barriers to therapy and discharge, (ii) assess for the presence of significant mental health or other emotional issues that require intervention, (iii) identify current cognitive and behavioral strengths and weaknesses, (iv) provide recommendations for optimal strategies for participating in rehabilitation therapies; and (v) provide information regarding safety and supervision needs relating to major life domains, such as capacity to make decisions. The evaluation should not be exhaustive or lengthy because it is only meant to obtain a glimpse of how the patient is doing at a moment in time. Patients almost always improve over time, and so an assessment has a time-limited shelf life and can easily be outdated within a matter of weeks or months. It is also important to remember that patients may have a number of sensory, perceptual, and motor impairments that constrain their ability to do some neuropsychology measures and/or questionnaires. As an example, the persons with hemispatial neglect may not be able to see half of a visual stimulus that is presented. Modification of measures when it will not compromise validity can be appropriate as well as testing the limits to determine the reasons for item failure (Caplan & Shechter, 2008). Other therapies will also likely assess aspects of cognition and report on cognitive functioning within the team meeting, including speech-language pathology, occupational therapy, and physical therapy.

In addition to interviewing the patient and family members (or others who can provide collateral information), the initial evaluation may include brief measures of cognition, depression and anxiety, substance abuse, awareness of impairments, pain, and other measures depending on the type of patient being assessed. For initial evaluations on the inpatient rehabilitation unit cognitive assessment is often limited to areas that would most impact inpatient care such as basic measures of attention, verbal learning and memory, and receptive and expressive language. Additional testing can be conducted when there is diagnostic uncertainty or to address specific questions. A list of common measures for an initial evaluation can be found in Table 2.

Table 2. Common measures for initial evaluations in rehabilitation settings

| Assessment Domain | Measure |
|-----------------------------------|--|
| History | <ul style="list-style-type: none"> • Chart review • Interview with Patient • Interview Collateral Source |
| Orientation | <ul style="list-style-type: none"> • Mini Mental-State Examination, Folstein, Folstein, and McHugh (1975) • Benton Temporal Orientation Test, Benton (1983) |
| Attention | <ul style="list-style-type: none"> • Wechsler Adult Intelligence Scale-IV Digit Span subtest, Pearson (2008) • Brief Test of Attention, Schretlen, Bobholz, and Brandt (1996) |
| Verbal Memory | <ul style="list-style-type: none"> • Hopkins Verbal Learning Test-Revised, Shapiro, Benedict, Schretlen, and Brandt (1999) |
| Receptive and Expressive Language | <ul style="list-style-type: none"> • Multilingual Aphasia Examination—Tokens Test, Benton, Hamsher, and Sivan (1994) • Boston Naming Test (15 item), Lansing, Ivnik, Cullum, and Randolph (1999) • Wide Range Achievement Test-IV Reading subtest, Robertson and Wilkinson (2006) |
| Substance Use | <ul style="list-style-type: none"> • Alcohol Use Disorders Test, Babor, de la Fuente, Saunders, and Grant (1992) |
| Pain | <ul style="list-style-type: none"> • Numeric Pain Rating Scale, Jensen and McFarland (1993) |
| Depression | <ul style="list-style-type: none"> • Geriatric Depression Scale, Yesavage et al. (1983) • Beck Depression Inventory—II, Beck, Steer, and Brown (1996) |

Recommendations

Recommendations largely follow the goals of assessment previously outlined. There is an emphasis on the patient's ability to make decisions and safety considerations. For example, would the patient be expected to be at greater risk for falls because of acute delirium, disorientation, spatial neglect, and anosognosia for a hemiparesis. If a patient is asked to make medical decisions is there any type of assistance that would allow them to make better informed decisions, such as repetition of risks and benefits, or breaking down information into smaller units? The anticipated level of supervision (i.e., intermittent, close 24-h) needed following discharge is an important consideration and will allow the team to make arrangements with family members and for other services necessary to achieve reasonable safety for the patient (Boake, 1996). Does the patient represent a significant risk for harming themselves and is there a need for a plan for ongoing monitoring and care? The neuropsychologist is often the point person for referrals to other specialties, especially when it comes to recommendations for psychotropic medications and mental health services following discharge from the rehabilitation unit.

Lastly, barriers to patient participation in therapies and methods for maximum engagement are important considerations. These can include strategies for communication (e.g., use of verbal and visual cues), facilitating recall of important information (e.g., use of a memory book to facilitate recall), and manipulation of the environment (e.g., providing therapy interventions in areas free of multiple stimuli). Behavior management and interaction recommendations can be part of the recommendations and can be appreciated by the rehabilitation team who is struggling with a patient management issue. An example of recommendations for patient interactions can be found in Table 3.

Communication

Communication in rehabilitation settings occurs primarily in team meetings, and to a lesser extent in “curbside” consults when the neuropsychologist is on the unit and is asked by a member of the team to help with an issue of importance. During team meetings there will be medical providers as well as therapists who discuss current functioning, rehabilitative treatments, barriers to care, and statements regarding discharge planning. Many treatment teams rely heavily on the functional independence measure (FIM), and so will describe functioning in terms of numbers representing varying levels of independence for this measure (Furlan, Noonan, Singh, & Fehlings, 2009). Cognition on the FIM is made up of several domains including memory, problem solving, social interaction, expression, and cognitive comprehension. The cognitive FIM may be reported by the neuropsychologist or may be assigned to a speech-language pathologist assigned to the rehabilitation team.

Confidentiality is one of the most problematic areas for psychologists in general, and is particularly problematic in rehabilitation settings. The team-oriented approach that is common in rehabilitation settings is not usually conducive to maintaining confidentiality, though team members would undoubtedly underscore its importance. In rehabilitation settings professionals may feel compelled to offer information of a sensitive nature even when the patient articulates expectations of privacy. Compounding the problem is the fact that there are more professionals involved in patient care than just the core team, resulting in poorer communication between team members. Lastly, there can be a lack of knowledge regarding appropriate ethical behavior across disciplines and how to achieve acceptable confidentiality. While some may not question the appropriateness of information or the role of those in attendance at team meetings, these issues are of primary importance in maintaining inappropriate disclosure of

Table 3. Patient Interaction Recommendations

| Patient Name | ID # |
|---|--|
| Refer to sections that are checked | |
| <input type="checkbox"/> | Agitation <ul style="list-style-type: none"> • Be available as much as possible during the agitated state. • Move the patient gently into new activities-do not make sudden or quick changes. • Redirect the patient's attention away from the focus of agitation. • Allow excessive talking-this may be an effective way to work through agitation. • Always describe what you are going to do with the patient before you do it. • Reconstruct the environment so that excessive distractions are removed. • Limit visitations if they make the patient more agitated. |
| <input type="checkbox"/> | Confusion <ul style="list-style-type: none"> • Be calm and soothing in manner when handling the patient. • Talk slowly and softly and only with the most necessary and important words. • Clock, calendar, personal items, should be within visual range of the patient. • Before giving instructions, place yourself in a position where you can be seen and before the patient is paying attention before you begin. |
| <input type="checkbox"/> | Inertia or Apathy <ul style="list-style-type: none"> • Make decisions for the patient. Do not ask "Do you want to...?" • Break down activities into smaller steps to avoid overwhelming the patient. • Be prepared to make requests more than once. |
| <input type="checkbox"/> | Irritability or Verbal Outbursts <ul style="list-style-type: none"> • Do not challenge or confront the patient about his "bad mood" or behavior. • Compromise whenever possible. Do things he does not like somewhere else. • Structure the day so that unexpected happenings are at a minimum. • When appropriate, redirect the patient's attention to something else. |

information. Considerable vigilance is required to strive for acceptable standards of confidentiality, including awareness among team members of the pragmatics for achieving this goal. What information can you place in the medical record? What information can be shared at a team meeting? Who can ethically attend a rehabilitation team conference? These are all questions that must be answered before a professional standard of confidentiality can be ensured. Explaining the limits of confidentiality, or the nature and purpose of an evaluation, is challenging in persons with cognitive impairments.

Impact

The actual impact of the neuropsychologists' role depends on the quality of their recommendations and whether it is perceived by the rehabilitation team as being meaningful vis-à-vis assisting them to work more easily with the patient (i.e., making their job easier) or facilitating a greater awareness and understanding of the patient. The return on the financial investment of having a neuropsychologist as part of the integrated care team is integrally related to these two important objectives. There is limited value in having a team member who completely overlaps with the skill set of another team member or when there are not tangible benefits of the team members' involvement. The neuropsychologist's recommendations will only have credibility to the extent that the team perceives them as being part of the team, which includes being present at team meetings and available and approachable for consultation by other team members.

Recommendations that are concrete and achievable are likely to gain more traction than those that are aspirational or overly laden with psychometric jargon. For example, stating that the patient has left hemispatial neglect and that their bed should be positioned so that their left side should face the wall as a means of promoting greater interaction with the rehabilitation team members and visitors. Describing a patient's domain of functioning with various labels of impairment is not perceived as being helpful compared to a concrete recommendation(s) on what could be done to improve the patient's life.

From a patient perspective impact comes from providing basic information about their condition(s) and prognosis, challenges they may face, and the "process" of rehabilitation in terms of what to expect and an approximate timeline. It is important to be positive and instill a sense of hope that facilitates the patient's resilience despite their sustaining a significant medical event.

Role Satisfaction

Being collaborative and not defensive about one's turf will facilitate a sense of team membership in the rehabilitation setting and is essential to being valued by other specialties. Psychologists and physicians have traditionally been the only doctoral level providers in rehabilitation, though physical therapists have now adopted the doctoral level as the standard for new

graduates. Regardless of one's terminal degree, team members are treated equally, their input is valued, and there is an expectation that everyone will work hard to develop positive and productive working relationships. Role satisfaction for the psychologist comes from being valued by the other team members and having positive working alliances with the other team members.

To a lesser degree, having some diversity of patient populations is helpful for avoiding stagnation and burnout as opposed to seeing the same type of patient (e.g., stroke) year after year. It can also be helpful to have other psychology colleagues to affiliate with at one's facility, if not for the purpose of consulting with others at least having an opportunity to arrange for coverage during absences. Lastly, psychologists should resist efforts to provide services designed for the sake of appearance that convey little actual benefit, such as providing cursory mental status examinations in order to say that all patients are seen by mental health within 24 h of arrival to the rehabilitation unit.

Brief Case Example

The following report (summary and recommendations only) is an example of a sample initial evaluation for a patient on a rehabilitation unit. Note that reports tend to be short and to the point, seldom exceeding 2–3 pages.

Summary and Diagnostic Impressions

The patient is fully oriented and is aware of the reason for admission. She denies any premorbid or concurrent cognitive impairment. Premorbid history is notable for multiple chronic medical ailments, including severe hepatic dysfunction, and history of depression. Formal evaluation revealed significantly decreased auditory attention and verbal learning and memory. Additionally, the patient is apparently experiencing very significant levels of depression and is not currently receiving medication for this condition. This pattern of cognitive impairments is generally consistent impaired cognition secondary to hepatic dysfunction, though the patient's depression may be a contributing factor to her cognitive performance. Results of this evaluation were reviewed with the patient and her care providers.

Recommendations

- (1) The patient is not currently able to make informed decisions concerning her medical, financial, and personal affairs. Family members should be consulted for decisions as needed.
- (1) The patient will require 24-h supervision following her discharge from a cognitive standpoint.
- (2) It would be useful to obtain a psychiatric consultation to obtain recommendations for pharmacological options for the patient's depression.
- (3) The patient may exhibit higher than expected levels of apathy because of her depression. The patient should be encouraged to choose between two options for therapy sessions to increase her sense of autonomy and to reduce the likelihood of treatment refusal.
- (4) We will continue to monitor the patient's affective status during his stay and provide supportive services as needed.

Advice for Early Career Neuropsychologists and Those New to Rehabilitation Settings

Neuropsychologists who are contemplating provision of services in rehabilitation services need to be aware not only of practice differences such as the types of patients, differences in the acuity level, and goals of the assessment, but also differences associated with "cultural" differences and expectations inherent in rehabilitation settings. Many neuropsychologists are traditionally trained in Psychiatry or Neurology departments, which tend to be consult-based specialties. A neuropsychologist in a rehabilitation setting should expect to provide an equal balance of interventional and assessment-related services, which is decidedly contrary to a typical consultative practice model in which the neuropsychologist provides an in-depth assessment and limited intervention beyond consultative recommendations. Rehabilitation patients and their families have many needs as it relates to education about their brain injury or illness, behavior management, adjustment to new disabling conditions, treatment or concurrent emotional difficulties, and issues relating to team dynamics and struggles with providers. Solely providing assessment services to rehabilitation patients would be dismissive of the great need these patients have for education and psychotherapy by someone familiar with brain-behavior relationships.

Not all cognitive-related services will be offered within the sole province of the neuropsychologist. Speech-language pathologists tend to provide much of the cognitive rehabilitation services in rehabilitation settings, and quite naturally their

interventional services tend to be guided in part by their own “cognitive-linguistic” assessments. This can be off-putting for many neuropsychologists, especially those who thought that the cognitive domain was their sole domain. There is a greater emphasis by speech-language pathologists to use non-standardized observations and tests of limited psychometric value, which is a different approach to assessment than many neuropsychologists are accustomed to. Turf wars, though, have no usefulness in the rehabilitation setting, and the goal is to find ways to work together with other provider specialties who spend some of their time addressing cognitive issues. And cognitive issues will also be addressed from time to time by other team members including physicians, nurses, occupational and physical therapists, and social workers. The goal is to determine how best to work with the team and what can be uniquely added to the work of others to the betterment of the patient.

Neuropsychologists should also expect to be part of the rehabilitation “team” for their observations to be given any reasonable consideration. There is a mentality in rehabilitation of working as a team to the benefit of the patient, which necessitates discussions with other professionals involved in the patient’s care, participation in team and family meetings, and having maximal availability to team members who are seeking to coordinate and improve patient care by way of curbside consultations. A neuropsychologist who is not fully participating in many of these non-reimbursable activities is often faced with skeptical team members who attribute uncertain value to the recommendations of the neuropsychologist. A neuropsychologist who is viewed as being in the trenches with other providers is given considerably more credence, their recommendations tend to be taken more seriously, and they are viewed as being fully vested in the care of the patients assigned to the team.

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Conflict of Interest

None declared.

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