

Dear Dr. Boren and Dr. Bussan:

On behalf of the American Academy of Clinical Neuropsychology (AACN) and our more than 1,000 members, we appreciate the opportunity to comment on the "Neuropsychological Testing" LCD (DL31990) under review by the Wisconsin Physicians Service (WPS) Insurance Corporation. The AACN is a national membership organization of board-certified neuropsychologists who successfully completed the examination process of the American Board of Clinical Neuropsychology (ABCN). ABCN is the largest peer-reviewed board certifying body for neuropsychologists that is widely recognized by government and state agencies.

AACN supports all efforts to update guidelines in a manner consistent with our practice guidelines. Upon review, AACN notes that some aspects of the policy are not in keeping with current laws, state-of-the-art science, and best practice of clinical neuropsychology. We briefly outline each area that may warrant further consideration:

- 1. Conflicts between state law and the provision of neuropsychological testing by non-psychologists.
- 2. The content, format, and utilization of existing ICD-9 codes for neuropsychological testing.
- 3. The proposed elimination of neuropsychology feedback sessions.
- 4. The proposed use of the FAST Scale to determine the provision of neuropsychological testing in Alzheimer's disease.

1. Conflicts between state law and the provision of neuropsychological testing by nonpsychologists. State law in at least two states [1] served by WPS is inconsistent with the following language contained in the draft policy (*Billing and Coding Guidelines, p. 2*):

"...nonphysician practitioners such as nurse practitioners (NPs), clinical nurse specialists (CNSs) and physician assistants (PAs) who personally perform diagnostic psychological and neuropsychological tests are excluded from having to perform these tests under the general supervision of a physician or a CP. Rather, NPs and CNSs must perform such tests under the requirements of their respective benefit instead of the requirements for diagnostic psychological and neuropsychological tests."

Most states restrict the use of psychological tests, some limit use to qualified mental health professionals (e.g. Minnesota), and a few only allow access by licensed clinical psychologists (e.g. Illinois). Upon review of the scopes of practice of non-psychologist licensure laws in WPS states, it is noted that none of them comment on the restricted use of psychologist scope of practice and complies with state law and the strong public policy of test security as described by the U.S. Supreme Court in Detroit Edison v. NLRB (1979) and its progeny.

[1] See Illinois 740 Ill. Stat. Ann. § 110/3-c; Minnesota Minn. Stat. Ann. § 148.965.

2. Concerns about the format, content, and utilization of existing ICD-9 codes for neuropsychological testing (Psychiatry and Psychology Services/L30489, pp. 16-23). During a recent informal survey of neuropsychological practices in the WPS-Medicare region, AACN identified several difficulties with the current LCD ICD-9 requirements. Currently, medical necessity criteria in the LCD ICD-9 policy require that Medicare recipients be diagnosed with a neuropsychological disorder by the referring physician prior to a neuropsychological consultation. This is problematic given that the neuropsychological consultation is requested specifically to clarify the actual diagnosis or treatment plan. This situation commonly arises in cases of dementia; cognitive impairment due to head trauma, brain tumors, or other neurological disorders; intractable epilepsy or Parkinson's Disease (when neuropsychological intervention); and when monitoring the cognitive effects of pharmacologic treatment. In each of these cases, results from the neuropsychological assessment are needed to inform the diagnosis and treatment plan, and thus the referring physician is unable to make a valid neuropsychological diagnosis prior to obtaining information from the neuropsychological evaluation.

Several additional concerns with ICD-9 code utilization for neuropsychological testing were discussed by neuropsychologists at the WPS Jurisdictional Open Meeting on April 28, 2011. A few examples are provided below:

a. A patient is referred by their physician with complaints of memory problems and a strong family history of dementia. Since a referral diagnosis of memory problems, memory decline, or any other neurological complaints diagnosis fails to meet WPS-Medicare medical necessity criteria for referral to neuropsychology, neuropsychological assessment results would have to yield evidence of a memory problem in order to be paid under Medicare. The same coding/reimbursement circumstance occurs with patients referred with a specific disorder (e.g. closed head injury, brain tumor, or any other neurological disorder). Paying for the diagnostic evaluation only if the findings are positive is akin to a physician referring a woman with lump in her breast and a strong family history of breast cancer for a mammogram but informing her that her insurance will only cover the mammogram if it yields evidence of breast cancer.

b. A patient is referred by neurosurgery for a neuropsychological examination as part of the evaluation to determine candidacy for implantation of electrodes in deep brain stimulation to treat Parkinson's disease. If the neuropsychological examination is negative for cognitive dysfunction, thus clearing the patient for surgery, the examination would likely not be payable under Medicare due to WPS-Medicare's restriction on neuropsychology using a neurological disorder as a primary diagnosis. In addition, neuropsychological evaluations prior to epilepsy surgery are highly predictive of outcome after anterior temporal lobectomy, and are often used to counsel patients about the risk for cognitive morbidity. A finding of normal or above average cognitive test scores may result in a decision not to proceed with epilepsy surgery. However, the finding of normal test scores would likely not be payable under Medicare due to WPS-Medicare's restriction.

c. A patient is referred for a neuropsychological evaluation to determine if there is cognitive impairment due to a history of renal disease. Since there is no applicable ICD-9 code for this evaluation, it would not be reimbursed (the same scenario occurs in patients with a history of cognitive dysfunction secondary to cardiac issues and other medical conditions that are

correlated with cognitive dysfunction). Because cognitive dysfunction from a variety of chronic medical conditions is increasingly an issue in the elderly, but still poorly recognized, especially in primary care, neuropsychological evaluations for such medical concerns are particularly critical and impact directly on the management of such patients (Cohen & Gunstad, 2010; Kalirao et al, 2011; Murray et al, 2006; Waldstein & Elias, 2001; Waldstein et al, 2010). We recommend that the LCD explicitly allow for testing of patients with such conditions by expanding the list of inclusionary diagnoses on page 3 of the draft LCD.

Based on these concerns and their impact on patient care, we respectfully request that referring physicians not be required to provide a neuropsychological diagnosis prior to making a referral for neuropsychological testing, and that the ICD-9 codes for neuropsychological testing be expanded to include pre-surgical evaluations, a code for negative findings (i.e. no cognitive dysfunction), codes for cognitive impairment secondary to medical conditions or primary neurologic disorders, and a code for Cognitive Disorder NOS. In addition, it would be helpful to list the ICD-9 codes for neuropsychological assessment separately from the ICD-9 codes for psychiatric diagnoses in order to clarify that neuropsychological testing is typically performed in the context of an identified or suspected medical condition, versus a primary psychiatric condition.

3. Proposed elimination of neuropsychology feedback sessions (Billing and Coding Guidelines, p. 5, section 7c). We recommend that neuropsychologists retain the ability to provide feedback to patients after a neuropsychological assessment, based on the following considerations:

- a. Similar to the practice of other doctoral level healthcare specialists, neuropsychologists provide complex, specialty services, and are uniquely trained to provide feedback. Neuropsychologists receive specialty training for an average of eight years in graduate school, internship, and postdoctoral fellowship, and specialize in providing feedback that links neuropsychological test results to diagnostic and prognostic information. In addition, during the feedback session, neuropsychologists provide tailored behavioral strategies to maximize functioning, make referrals to other specialty providers (e.g. psychiatry, rehabilitative therapists), and provide recommendations for nonpharmacological interventions and community resources that are empirically shown to optimize treatment. In addition, feedback is frequently provided with family members present, which is especially important given that nursing home placement for individuals with dementia may be delayed by 18 months if caregivers are provided with education and connected to caregiver resources (Mittelman, et al. 2006).
- b. Research suggests that neuropsychology feedback is highly valued by patients (Westervelt, et al. 2007), and significantly improves clinical outcomes and treatment satisfaction in individuals with traumatic brain injury (Pegg et al., 2005).
- c. We conducted an informal survey of several physician colleagues in Wisconsin and Minnesota. All of the physicians we consulted, including neurologists, indicated that they do not feel they have the specialty knowledge to discuss most domains of neuropsychology feedback, and further noted that it is often impractical to discuss details of the evaluation in the context of short appointments that are often scheduled months after the neuropsychological evaluation is completed. Many of these physician colleagues noted that they will send formal comments about this issue.

d. The typical neuropsychological feedback session lasts between 31-90 minutes, which we feel is a minor investment of time given the benefits noted above.

4. Proposed use of the FAST scale to determine the provision of neuropsychological testing in Alzheimer's disease (Billing and Coding Guidelines, p.3, section 2). We are committed to ensuring state-of-the-art care for individuals with Alzheimer's dementia or suspected Alzheimer's dementia, and clarifying the unique role of neuropsychological assessment in providing highly valid, reliable information about diagnosis, prognosis, comorbid psychiatric issues, behavioral issues, and functional impairment. As such, we request that the FAST scale not be utilized to determine the provision of neuropsychological services, based on the following considerations:

- (a) The process for arriving at a clinical diagnosis of Alzheimer's disease is complicated, given that memory complaints are common in normal aging, depression, stroke, mild cognitive impairment, as side effects of medications and medical problems, in other subtypes of dementia, and in several other conditions. The FAST Scale is a measure of functional ability (Trenkle, Shankle & Azen, 2007), and does not provide information about the etiology for functional impairments, or assess cognitive functioning. Thus, a score on the FAST scale does not equate to a diagnosis of Alzheimer's disease or any other cognitive disorder, and utilization of this score to restrict the provision of neuropsychological services would largely prevent the use of neuropsychological assessments that could assist with differential diagnosis and medical management. It is further noted that neuropsychological assessments significantly increase diagnostic accuracy in dementia even after a clinical assessment with a physician specialist (Geroldi et al, 2008; Hentschel et al, 2005), and that neuropsychological assessments are a crucial tool for differential diagnosis (Gilman, et al. 2005). Furthermore, information from neuropsychological assessments is incorporated into physician discharge summaries a majority of the time (Temple, Carvalho & Tremont, 2006). Accurate differential diagnosis of memory problems is especially important when medical management strategies would change drastically as a result of increased diagnostic precision, as in the case of Lewy Body dementia (where antipsychotic medication is contraindicated to treat hallucinations), in frontotemporal dementia (where Donepezil could lead to symptomatic worsening; Mendez, Shapira, McMurtray, & Licht, 2007), in depression (where correct treatment is crucial to recovery), in normal aging (where no medication is needed), and in delirium (where there is a need to rapidly determine the underlying cause), among other examples. For these reasons, we maintain that restricting the provision of neuropsychological testing based on the FAST scale would seriously compromise optimal medical management for individuals with Alzheimer's disease and other dementias.
- (b) Many prescribers utilize multiple memory medications (e.g. an acetylcholinesterase inhibitor and an NMDA-receptor antagonist) when dementia progresses from the mild to moderate and/or severe stage (Hermann & Lanctôt, 2011). Neuropsychological testing directly informs pharmacological management by providing statistically-based information to determine dementia severity. The proposed use of the FAST scale would prohibit neuropsychological testing in patients who had already been diagnosed with Alzheimer's disease, compromising the ability to detect progression in dementia and to provide appropriate pharmacological management.

(c) Repeat neuropsychological testing is highly sensitive to detecting even subtle changes in cognitive functioning, and determining treatment response to memory medication, even in individuals with severe Alzheimer's disease (Cummings, et al, 2010). Use of the FAST scale to restrict the provision of neuropsychological assessments to those individuals who are not yet diagnosed with Alzheimer's disease would prohibit the monitoring of such treatment effects, possibly compromising optimal pharmacological management.

Finally, during the Jurisdictional Open Meeting, we were very appreciative of your request that we provide you with a Model LCD for neuropsychological services. AACN is partnering with other national neuropsychology organizations to create a Model LCD, and we look forward to submitting it for your review during the open comment period. In the meantime, we welcome any questions that you might have about the concerns outlined in this letter, and we would be happy to provide you with any additional information that you might find to be helpful (michelle.braun@wfhc.org; 262-687-6167). We thank you for your valuable time and consideration of these points.

On behalf of the American Academy of Clinical Neuropsychology,

Michelle Braun, PhD, ABPP-CN (*Chairperson of LCD Advisory Group*) *LCD Advisory Group Members:* Jacobus Donders, PhD, ABPP-CN Paul Kaufmann, JD, PhD, ABPP-CN David Tupper, PhD, ABPP-CN Stuart Waltonen, PhD, ABPP-CN Karen Wills, PhD, ABPP-CN

## References

Cohen, RA, & Gunstad, J. (Eds.), (2010). Neuropsychology and Cardiovascular Disease. New York: Oxford University Press.

Cummings, J., Jones, R., Wikinson, D. Lopez, O. et al (2010). Effect of donepezil on cognition in alzheimer's disease: a pooled data analysis. *Journal of Alzheimer's Disease*, 21(3), 843-851.

Geroldi C, Canu E, Bruni AC, et al (2008). The added value of neuropsychologic tests and structural imaging for the etiologic diagnosis of dementia in italian expert centers. *Alzheimer Disease and Associated Disorders*, 22(4, 309-20.

Gilman S, Koeppe R.A., Little, R., et al (2005). Differentiation of Alzheimer's disease from dementia with Lewy bodies utilizing positron emission tomography with [18F] fluorodeoxyglucose and neuropsychological testing. *Experimental Neurology. Feb; 191 Suppl 1*:S95-S103.

Hentschel, F., Kreis, M., Damian, M., Krumm, B. & Frolich, L. (2005). The clinical utility of structural neuroimaging with MRI for diagnosis and differential diagnosis of dementia: a memory clinical study. *International Journal of Geriatric Psychiatry*, *20*, 645-650.

Hermann, N. & Lanctôt, K (2011). Memantine in dementia: A review of the current evidence. *Expert Opinion in Psychotherapy*, *12*, 787-800.

Kalirao, P., Pederson, S., Foley, RN, Kolste, A, Tupper, DE, Zaun, D, Buot, V., & Murray, AM (2011). Cognitive impairment in peritoneal dialysis patients. American Journal of Kidney Diseases, 57(4), 612-620.

Mendez, M.F., Shapira, J.S., McMurtray, A., & Licht, E. (2007). Preliminary findings: behavioral worsening on donepezil patients with frontotemporal dementia. *American Journal of Geriatric Psychiatry*, *15*, 84-87.

Mittelman M.S. et al. (2006). Improving caregiver well-being delays nursing home placement of patients with Alzheimer disease. *Neurology*, 67, 1592-1599.

Murray, AM, Tupper, DE, Knopman, DS, Gilbertson, DT, Pederson, SL, Li, S, Smith, GE, Hochhalter, AK, Collins, AJ & Kane, RL (2006). Cognitive impairment in hemodialysis patients is common. Neurology, 67(2), 216-223.

Pegg, P.O., Auerbach, S.M., Seel, R.T., Buenaver, L.F., et al (2005). The impact of patientcentered information on patients' treatment and outcomes in traumatic brain injury rehabilitation. *Rehabilitation Psychology*, *50*(*4*), 366-374.

Temple R.O., Carvalho J., & Tremont G. (2006). A national survey of physicians' use of and satisfaction with neuropsychological services. *Archives of Clinical Neuropsychology*, 21(5), 371-382.

Trenkle, D. L., Shankle, W. R., & Azen, S. P. (2007) Detecting cognitive impairment in primary care: Performance assessment of three screening instruments. *Journal of Alzheimer's Disease*, *11*, 323-325.

Waldstein, SR, & Elias, MF (Eds.), (2001). Neuropsychology of Cardiovascular Disease. Mahwah, NJ: L. Erlbaum.

Waldstein, SR, Wendell, CR, Hosey, MM, Seliger, SL, & Katzel, LI (2010). Cardiovascular disease and neurocognitive function. In CL Armstrong & L Morrow (Eds.), Handbook of Medical Neuropsychology (pp. 69-100). New York: Springer.

Westervelt, H. J., Brown, L. B., Tremont, G., Javorsky, D. J., & Stern, R. A. (2007). Patient and family perceptions of the neuropsychological evaluation: how are we doing?. *The Clinical Neuropsychologist*, *21*, 263-273.