

March 1, 2006

Naomi Aronson, PhD Executive Director Technology Evaluation Center BlueCross and BlueShield Association 225 North Michigan Avenue Chicago, IL 60601

## Dear Dr. Aronson:

This letter provides additional evidence that supports cognitive rehabilitation treatment provided by speech-language pathologists. BlueCross and BlueShield Association regards cognitive rehabilitation as "investigational," but as previous data submitted points out, there is much research that supports cognitive rehabilitation, including data from the American Speech-Language-Hearing Association (ASHA) National Outcomes Measurement System (NOMS), NIH, and researchers in the field. Additionally, the U.S. Department of Defense and the Department of Veterans Affairs are actively engaged in cognitive rehabilitation treatment and research.

In an article entitled "Evidence-Based Cognitive Rehabilitation: Updated Review of the Literature From 1998 Through 2002," published in the *Archives of Physical Medicine & Rehabilitation* (August 2005), which updates a 2000 literature review, the authors report that there is "substantial evidence to support cognitive-linguistic therapies for people with language deficits after left hemisphere strokes;" as well as for apraxia, and also for cognitive rehabilitation for people with traumatic brain injury (TBI). Of the 87 studies evaluated, 17 were class I, 8 were class II, and 62 were class III. The 17 class I studies included 291 patients with TBI, and 247 patients with stroke, with 16 of the 17 studies providing evidence for the effectiveness of cognitive rehabilitation. The report concludes by noting that "future research should move beyond the simple question of whether cognitive rehabilitation is effective, and examine therapy factors and patient characteristics that optimize the clinical outcomes of cognitive rehabilitation."

The authors also compared cognitive rehabilitation and alternative interventions (no treatment, conventional rehabilitation, pseudotreatment, psychosocial treatment) and found cognitive rehabilitation produced greater improvement in two thirds (64%) of study comparisons. The authors concluded that their overall analysis of 47 treatment comparisons from class I studies, representing 1,801 patients, demonstrates that cognitive rehabilitation is of significant benefit when compared with alternative treatments.

Additional support for cognitive rehabilitation is found via the U.S. Department of Defense and the Department of Veterans Administration, which have joined forces to form the Defense & Veterans Brain Injury Center (DVBIC). Cognitive rehabilitation is not investigational, from the Veterans Administration (VA) perspective, according to Kyle Dennis, Ph.D., Audiology and Speech Pathology Program, Veterans Administration, Washington, D.C. He reports that the (DVBIC) is actively engaged in innovative and cutting edge rehabilitation of brain injured veterans and active duty personnel. The DVBIC, in addition to providing leading edge care, conducts clinical research as well. One of the Center's primary objectives is to utilize results from the research it conducts to develop evidence-based standards of care (The Henry M. Jackson Foundation for the Advancement of Military Medicine website, November 11, 2005). Why the emphasis on brain injury? Because it is becoming the "signature wound of the Iraq war," according to military doctors (USA Today, March 2005).

Physicians report that the injury is often hard to recognize, for doctors, for families, and for the troops themselves. Soldiers may look fully recovered, but their brain functions remain labored. Symptoms of TBI include impaired memory, loss in problem-solving abilities, poor concentration, difficulty making simple decisions, and increased anxiety. In severe cases, victims must learn to walk and talk.

Speech-language pathologists provide cognitive rehabilitation treatment which helps patients with memory, attention, speech production, language formulation, executive function and organization.

War veterans from Operation Iraqi Freedom, most of who are young adults, return to their hometown communities where private hospitals and rehabilitation facilities are needed to meet their treatment needs. The U.S. government recognizes the need and effectiveness of cognitive rehabilitation for brain injury, and so should private health plans.

Further support for cognitive rehabilitation is provided by a task force organized under the auspices of the European Federation of Neurological Societies which concluded that there is enough overall evidence to award a grade A recommendation (based on randomized controlled trials) to some forms of cognitive rehabilitation in patients with neuropsychological deficits in the post acute stage after stroke and TBI (*European Journal of Neurology*, 2003, 10: 11-23).

The National Institutes of Health (NIH) acknowledges "research in the area of TBI rehabilitation is exceedingly difficult to conduct," and notes that adequate sample sizes and appropriate comparison groups are difficult to achieve in a clinical environment. However, the NIH Consensus Statement concludes that "the fact that most research to date has not been rigorous must not be interpreted to imply that rehabilitation programs are not effective," (NIH Consensus Statement, 1998; 16:1-41).

Aronson 2/21/2006 Page 3

John Whyte, MD, PhD, provides reasons for the "paucity of rigorous efficacy research in cognitive rehabilitation" in an article entitled "Promoting Research in Cognitive Neuroscience and Cognitive Rehabilitation" (Health Policy Newsletter, Vol. 18, #3, September 2005). Dr. Whyte explains that only controlled research can sort out the impact of treatment from ongoing spontaneous recovery, yet this research is extremely complex and costly to undertake. It is challenging to define the active ingredients of an interactive therapy provided by a clinician and the most appropriate control or comparison condition. Research is complicated by controversies about the structure and neural control of normal cognitive processes, and the appropriate methods for measuring those processes. Gathering a sufficient number of patients with similar cognitive characteristics further complicates research efforts. However, as Whyte concludes, the absence of firm efficacy data is not evidence of the ineffectiveness of cognitive rehabilitation. He notes that there may be many individuals who could benefit from cognitive rehabilitation, but who are denied those services because of the current state of evidence. He reports that researchers at Moss Rehabilitation Research Institute (Philadelphia, PA), in collaboration with colleagues at other institutions, are working to advance the state of research in this area in hopes of identifying specific cognitive rehabilitation techniques that can have a meaningful impact of real-world function.

ASHA urges BlueCross and BlueShield Association to reconsider its position on cognitive rehabilitation, recognize the scientific support for this treatment, and provide coverage and payment for this procedure for individuals with cognitive impairment.

Sincerely,

Janet McCarty, MEd Private Health Plans Advisor

Cc: NAIC

Deborah Warden, MD Director, DVBIC