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Presented to the Advisory Council on Brain Injuries on April 15, 2011 by Janssen Rehab Consulting
The task force continues its efforts to advance the provision of cognitive rehabilitation services to Iowans who have experienced brain injuries. The focus of the task force in 2011 has been to:

1. Assess the progress of the 2008 retreat findings, action items and recommendations
2. Determine priority action items in HRSA Goal #2 (specifically 2.1 and 2.4).

**Goal #2:** Increase the availability of appropriate support and services for people after brain injury by expanding the availability of cognitive rehabilitation services in the state of Iowa.

This work was advanced by the task force in meetings March 2 and March 29, 2011 which were facilitated by consultant, Lynn Janssen. The 2008 Brain Injury Summit resulted in participants proposing two tiers of action items to serve as a guide to the Advisory Council on Brain Injury. The status of action items as of March 1, 2011 is noted below.

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<th>Action Items – Top Tier</th>
<th>Status as of March 1, 2011</th>
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<td>Need to know the potential levels of service delivery, how many are there and who could do what at each level. How many professionals/paraprofessionals are needed to cover the continuum? What are the major levels of training for each type of service?</td>
<td>The Council agreed that the delivery of brain injury services should be provided by professional level providers (OT, SLP, neuropsychology, psychology). Paraprofessional providers should have Certification as Brain Injury Specialists (CBIS). There is a role for family members that is yet to be defined. There has been no estimate of the number of professionals/paraprofessionals needed to cover the continuum of care.</td>
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| Develop definitions of the levels of cognitive rehabilitation and how each could be funded. Learn from TBI model systems and the insurance companies. | The definition of Cognitive rehabilitation has been taken from the BIAA and was adopted by the Iowa Council in 2010. That definition is: “Cognitive rehabilitation is the systematically applied set of medical ant therapeutic services designed to improve cognitive functioning and participation in activities that may be affected by difficulty in one or more of the cognitive domains. When properly applied, it is based upon sound scientific theoretical constructs and strategic approaches
Theoretical models of cognitive rehabilitation vary along several different dimensions. Treatments may be process specific, focused on improving a particular cognitive domain such as attention, memory, language, or executive functions.

The Council considered treatment models such as:
- San Diego Cog Smart
- Walton Cognitive Rehabilitation Model
- Medicaid practices in Wyoming, Virginia, New Hampshire
- New Mexico Department of Aging model

Additionally the council identified that Wellmark was the first and only Blue Cross/Blue Shield insurer to cover cognitive rehabilitation for certain licensed providers.

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<th>Determine/define types of training essentially required for each service level.</th>
<th>Considerations:</th>
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<td>• Licensed professionals to initiate the service – possibly licensure plus CBIS certification</td>
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<td>• Practitioners/associates – possibly licensed by the state. Could include social workers, LPNs, etc. Consider annual continuing education requirement</td>
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<td>• Family – to be trained by associates</td>
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**Action Items – Second Tier**

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<td><strong>How to support lifelong cognitive rehabilitation within the continuum of care</strong></td>
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<td><strong>How to educate community, payers, providers, etc on the need for lifelong and various level of cognitive rehabilitation.</strong></td>
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<tr>
<td><strong>What payers need to know or how they work. What they need from us. How to get funders and providers to collaborate to meet the lifelong needs of brain injury survivors.</strong></td>
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From this work, IDPH staff under the direction of the Advisory Council created a set of goals focused on expanding cognitive rehabilitation services in Iowa. The goals and objectives were defined as follows:

**Project Goal # 2: Increase the availability of appropriate support and services for people after brain injury by expanding the availability of cognitive rehabilitation services in the state of Iowa.**

**Objective 2.1**
By March 2010, the Services Task force of the TBI Council will develop definitions for cognitive rehabilitation in Iowa and recommendations for policy will be presented to lawmakers and key stakeholders in Iowa.

**Objective 2.2**
By March 2010, IDPH, the TBI Council, BIA-IA, the Iowa Association of Community Providers and the University of Iowa’s Center for Disabilities and Development will assess the training needs of service providers and educators in Iowa regarding the provision of cognitive rehabilitation.

**Objective 2.3**
By March 2010, IDPH staff and staff from the Mayo Clinic will develop a training curriculum to improve the skills of Iowa’s service providers and educators to provide cognitive rehabilitation services and develop a tool to measure the effectiveness of the training.

**Objective 2.4**
By March 2011, the TBI Council will develop a taskforce to make recommendations, regarding cognitive rehabilitation in education settings.

**Objective 2.5**
Beginning April 2010, IDPH and Mayo Clinic staff will offer four training sessions to service providers across the state, including rural areas and one population-specific training for educators.

**Objective 2.1: Definitions**

The task force determined that it could not move forward on objectives 2.2 through 2.4 until objective 2.1 was completed. Attachment #1 is offered to address many of the components of objectives 2.1 through 2.4. That document includes:

- Neurocognitive remediation definition
- Neurocognitive remediation types of intervention
- Neurocognitive remediation deficit areas
- Levels of professional and specialists intervention, qualifications and required training

The task force advanced the definition of cognitive rehabilitation to a definition that is more inclusive of the continuum of care reflected in the overall plan. The definition moved from a medical model to a disability service model. The name of the service was more clearly defined and labeled as neurocognitive remediation. The task force also recommended who should provide the services, as well as the training and certification requirements.
Objectives 2.2, 2.3, and 2.4: Constituencies and Training

Completion of 2.1 allowed the committee to address the objectives noted in 2.2 through 2.4. The task force determined that the key constituency starting point for this process would be through Iowa Medicaid. The task force has yet to determine the timing of the contacts with Medicaid, however following those conversations the task force will make any needed changes to the attached document and begin conversations with legislators as appropriate. The task force does not recommend approaching insurance companies at this time for additional coverage of neurocognitive remediation services.

Regarding training for the providers, the task force recommended:

- Licensed professionals (OT, SLP, Psychologists) be encouraged to enhance their brain injury skill set through additional training or through CBIS training
- Certified Brain Injury Specialist training provided through the Academy of Certified Brain Injury Specialists should be expanded in scope and availability to increase the amount of qualified providers throughout Iowa

Task Force Plan

1. Position Paper
   a. Present to Brain Injury Council for recommendations
   b. Present to Iowa Medicaid for recommendations
   c. Present to Iowa Legislators as recommended by task force

2. Task Force
   a. Realign members of task force to prepare for next steps. Include Occupational Therapist on task force.
   b. Create focus on neurocognitive remediation education to address training and recruitment of licensed professionals and specialists.
   c. With Iowa Medicaid and Legislators determine the frequency, duration, cost and intensity of service delivery

3. HRSA Grant
   a. Update Objectives/Activities related to Project Goal #2 to reflect current status and revisions.
   b. Submit updated information and grant application to HRSA to advance neurocognitive remediation plan.

Respectfully Submitted:

Lynn Janssen
Consultant to the Brain Injury Task Force
Neurocognitive Remediation is a person centered, systematically applied set of rehabilitative and therapeutic services designed to improve cognitive functioning and ability to participate in activities of daily life affected by deficits in one or more cognitive domains. It is based upon scientific constructs and strategic approaches drawn from numerous disciplines including Speech Language Pathology, Occupational Therapy, Neuropsychology and Rehabilitation Psychology.

Models of cognitive remediation vary along several different dimensions. Treatments focus on improving particular cognitive domains such as attention, memory, language, or executive functions.

To support independence and success in the activities and contexts of everyday life, neurocognitive remediation utilizes procedures designed to assist individuals with cognitive deficits resulting from brain injury. Neurocognitive remediation specialists utilize treatment plans developed by Licensed Health Care Professionals (LHCPs) to assist individuals with brain injury in applying systematic processes to rehabilitate or remediate their cognitive deficits.

Neurocognitive remediation always involves:

- The development of an individual’s specific cognitive and broad life skills – see below for the skills worked on, and the development of that individual’s ability in the real world to use and apply those skills in day-to-day life functioning, so as to help individuals with brain injury to live, learn, work, and play as independently as possible. Neurocognitive remediation also includes teaching individuals how to develop and learn compensatory strategies for their cognitive and life skill deficits in order to overcome obstacles to independence due to the effects of their brain injury.

- Assisting the individual to identify and be aware of their cognitive and life skill strength areas as well as deficits post-injury.

- Increasing the individual’s abilities to function, again, in the real world and to increase their coping and mastery in daily life, vocation and avocation (word) pursuits.

- Collaborating with the individual to develop adaptive goals to increase real-life skills and to learn how to access community resources, supports, and services for persons with brain injuries.

- Educating individuals, as well as staff working with them and involved family members as to the individual’s strengths and deficits and the rehabilitation and life skill strategies being taught to the individual.

(How about something as to behavioral difficulties?)
Neurocognitive remediation specialists:

Focus on working directly with person with brain injuries in restoring/improving, remediating, and helping the individual compensate for their cognitive deficits in such areas of skill as:

Attention and concentration
Memory and learning
Language, both expressive and receptive skills
Perceptual skills, including visual and auditory (hearing) perception
Higher-order “executive” cognition/thinking skills, such as:
  - Problem-solving
  - Reasoning
  - Abstract thinking
  - Organization
  - Multitasking
  - Sequencing
  - Planning
  - Awareness and insight
  - Judgment
  - Decision-making

Staff Requirements:

Neurocognitive remediation assessment and treatment planning requires state licensure in speech language pathology, occupational therapy, or psychology.

Neurocognitive remediation specialist requires a bachelor’s degree or licensure as a health care provider. Certification as a Brain Injury Specialist (CBIS) through the Academy of Certified Brain Injury Specialists (ACBIS) also required.