INTRODUCTION

Appropriate work is an important social determinant of health. Ensuring that individuals with work-limiting injuries and illnesses stay at or return to work requires a team approach. In addition to health care providers, employers, vocational rehabilitation counselors, attorneys, and workers' compensation and disability insurance carriers may be part of that team. When the work-limiting injury or illness includes cognitive impairment, the team may need to expand further to provide effective communication and care.

Physical work capability forms such as those used by workers' compensation and disability benefits carriers are a familiar documentation and communication method for the return-to-work team. We created an analogous Cognitive Work Capabilities Form to help clinicians systematically document cognitive work abilities to support positive work outcomes for workers with cognitive impairment. Examples of how members of the care team can benefit from using this form include employers seeking clearance to return an employee to work or guidance on work accommodations, workers' compensation adjusters seeking an employment status update as a patient recovers, or a long-term disability carrier needing documentation that a patient is unable to work. Unlike most physical work capability forms, this cognitive work capability form also guides the user through the evaluation process and includes a list of possible job modifications.

PURPOSE OF THE FORM

The purpose of the Cognitive Work Capabilities Form is to guide assessment of cognitive function and efficiently document cognitive work capacity based on best estimates and medical opinion. The approach to completing the form should be customized based on the purpose for which being used.

The form can be used for the following assessment and documentation goals of the treating provider:

- Guide a systematic assessment process to prevent ordering unnecessary, extensive cognitive evaluations
- Plan a safe release to work
- Plan return-to-work timelines
- · Assist an employer with work accommodations
- · Assist vocational rehabilitation counselor with appropriate work placement
- Document need for work disability benefits
- Update cognitive work capacity during recovery for employers, voc rehab counselors, and workers' compensation and disability insurance carriers
- Document lack of work capacity for Social Security Disability Insurance (SSDI) application

The form can be used for the following documentation needs of other clinicians on the care team:

• Occupational Therapy, Speech Language Pathology, Neuropsychiatry, Psychiatry, and Mental Health Counseling providers can complete sections of the form within their professional ability as a communication tool with the primary treating provider or other team member.

POPULATIONS SERVED BY THIS FORM:

The Cognitive Work Capabilities Form can be used with primary cognitive diagnoses, such a brain injury, or with diagnoses for which cognitive deficits may be a secondary symptom, such as depression (see list of diagnoses below). This form does not replace a mental health evaluation; however, the form addresses mental health performance areas that are directly linked to cognitive performance areas. For example, an individual with anxiety may have limited ability to sustain attention.

- Traumatic Brain Injury (TBI)
- Concussion
- Cerebrovascular Accident (CVA)
- Multiple Sclerosis (MS)
- · Mild Dementia
- Post-Acute COVID Syndrome (PACS)
- Cancer and symptoms associated with cancer treatment
- · Attention Deficit Disorders
- Schizophrenia
- Post-Traumatic Stress Disorder (PTSD)
- Mood disorders (depression, anxiety, bipolar disorder, etc.)
- Obsessive-Compulsive Disorder (OCD)
- Sleep Disorders
- Burnout
- Learning Disabilities

INSTRUCTIONS FOR USING THE FORM

Use of this form should be tailored to the purpose of the assessment and the severity of the condition but should follow these steps:

Step 1: **Assessment process**: This step involves gathering available information from the care team, interviewing the patient, and performing testing during the visit. This process should complement other aspects of the patient visit without taking substantially more time.

Step 2: **Rating cognitive function**: Cognitive capabilities have been divided into 3 categories on the form: Cognition, Self-regulation, and Resilience. A scale of 1-4 is used to rate performance in each category.

- 1 = **No limitations** patient can independently perform this aspect of work.
- 2 = **Needs environmental modifications** patient can perform this aspect of work with strategies or environmental adjustments that do not require an increased level of supervision or assistance.
- 3 = **Needs close supervision or assistance** patient can perform this aspect of work only with increased level of monitoring from a supervisor or with direct assistance.
- 4 = **Unable to perform despite close supervision or assistance** patient unable to perform this aspect of work even with a supervisor or coworker monitoring and providing direct assistance.

Option 5 – Unable to estimate must be used with caution. This should only be chosen if the provider does not have enough information to estimate or the item being rated is outside of the provider's area of practice.

Step 3: **Select job modifications to accommodate limitations in cognitive capabilities**. Job modifications are listed at the end of each cognitive category for providers to choose. These are designed to be flexible to patient circumstance. Job modifications can be chosen for the following purposes:

- To help an employer support successful employee return to work
- To help a vocational rehabilitation counselor find appropriate employment for a client
- · To document limited or no work capacity:

- Choosing an extensive number of job modifications supports an assessment that the patient has a limited cognitive work capacity.
- If a certain category of capabilities has been rated mostly with 4s, job modifications within that category will not promote work ability. In this situation you should not select any job modification options.

DEFINITIONS

Job modification - Adjustments in work environment, support, or how job tasks are done. Modifications differ from accommodations in that they are generalized. Providers supply modifications with the intention that they can be customized to a specific job.

Job accommodation: Work adjustments that are specific to job functions. Job modifications supplied by the provider are customized by the employer into job accommodations. The Americans with Disability Act uses the term "reasonable accommodation" defined as: modification or adjustment to a job, the work environment, or the way things are usually done during the hiring process. These modifications enable an individual with a disability to have an equal opportunity not only to get a job, but successfully perform their job tasks to the same extent as people without disabilities."

Impairment: An objective limitation in physiologic or psychologic function.

Disability: A subjective decrease in social or vocational functioning. Disability can be partial or total, and temporary or permanent. These categories can help guide form completion. Although disability category is not documented directly on the form, a patient with temporary disability will benefit from regular updates to the form during the healing process compared to a patient with permanent disability, who may need less frequent reassessments.

HOW THE FORM WAS DEVELOPED

The Cognitive Work Capabilities Form was developed to address the difficulty communicating cognitive work function both between providers and between providers and insurance or disability carriers. The available tools we researched to fill these communication needs were either not efficient or did not address job modifications. The Work Disability Functional Assessment Battery (WD-FAB), while a useful tool for providers to understand patient function, it includes both physical and mental health domains, is based on patient self-report of function only, and did not meet provider-to-provider or provider-to-carrier communication goals. The Social Security Administration's Mental Residual Functional Capacity (RFC) assessment also was considered, but need for efficiency for providers and alignment to work were not met. We based the flow of the Cognitive Work Capabilities Form on the SSA Mental RFC Assessment then added categories of executive function, a standard rating scale, and associated job modifications to support clear communication with employers and successful return to work.

The first step in establishing validity was to align each category title, and the questions within each category, with current research. The WB-FAB and International Classification of Function (ICF) Core Set for vocational rehabilitation were used to:

- Consider cognitive and behavioral constructs
- Add questions to represent these constructs
- Reword questions to align with already researched wording

Numerous providers including Physical Medicine & Rehabilitation and Occupational Medicine physicians, Workers' Compensation Nurse Case Managers, Physical Therapy researchers, Psychologists, and Behavioral

Health professionals contributed to revisions. The form was presented informally at two time points to a group of clinicians and work disability experts for feedback. It also was presented to experts to understand how bias may impact use of the form. We then created a Continuing Medical Education session, during which nine providers with different clinical specialties were given a list of validity questions.

The form was given to Return-to-Work Coordinators (nurses, physical therapists, social workers, employment specialists) and other clinical experts to trial the form with patients to promote communication of cognitive work ability with other care providers. They could also give this form to other treating providers as a tool to use with their patients.

Through this process the form was improved upon to the extent that we felt it was ready for more formal validity testing. The form, manual, quick guide, and a list of validity questions were sent to an expert panel. The expert panel included 12 individuals incorporating a range of specialty areas, research, and a patient representative. Questions in the survey incorporated aspects of validity and usability. From the results of this survey and workshopping with some members of the expert panel, the form was further updated to its current version.

The next phase of validity testing will include asking providers to incorporate use of the updated form into practice. After 3-4 months using this form, providers will be sent a validity survey.

CASE STUDY

Jane is a 53 year old LNA with a history of work related concussion two months ago when she was hit by a patient in the dementia care unit of the hospital where she works. She has been out of work since the time of injury due to a combination of neck pain, feeling of fogginess, headache, light sensitivity, and increased level of symptoms when she is around people. She is here to see her PCP, Dr. Smith, for follow up.

While out of work, Jane has done some physical therapy for her neck pain. The Workers' Compensation carrier is looking for an update on her work status and whether she should remain out of work. The patient is questioning her ability to go back. Per Jane's physical therapist, her neck pain has improved and she is able to lift 50 lbs during PT visits. Dr. Smith fills out the workers' compensation physical capacity form with this information stating she meets the physical demands of the job. Dr. Smith is unsure the patient can tolerate the environmental variables at work or the cognitive demand of the job. Dr. Smith decides to use the Cognitive Work Capabilities Form to guide an efficient assessment of her cognitive capacity and provide documentation to the insurance carrier.

Dr. Smith knows the patient from past medical care before the injury, has seen her once 5 weeks ago so is aware of the injury history, and has the PT notes to refer to. Outside of the initial Emergency Department visit and physical therapy appointments, there have been no other medical visits related to the injury.

The following is a culmination of Jane's responses to Dr. Smith's questions. The interview has been divided into Cognition, Self-Regulation, and Resilience categories following the order of the form. It is important to note that Dr. Smith already has information related to basic cognitive performance by observing Jane while discussing physical abilities of the job and from Jane's performance in physical therapy. Dr. Smith takes fewer than 10 minutes to work through the cognitive form.

Cognition. Jane reports that she has been having some challenges with cooking. Although she can cook basic items such as eggs or hamburgers when she remains standing next to the stove, she has been forgetting some items in the oven. She has also had difficulty cooking multiple items at once and timing meals. She has compensated by using timers and alarms on her phone. Jane usually does her taxes using an online program but has had difficulty with this and needed to get help from her husband. She was disorganized with tax-related documents she received in the mail and had difficulty problem-solving potential deductions for the year. She visually fatigued after 20 minutes of computer time, developing a headache and a feeling of fogginess. She has been able to tolerate driving to and from the grocery store 30 minutes and spending an hour doing her groceries using a list.

Cognition	1	2	3	4	5
Remember simple instructions	х				
Remember complex instructions		х			
Understand simple instructions	х				
Understand complex instructions		х			
Carry out an individual task	х				
Carry out multiple tasks		Х			
Make simple decisions	Х				
Perform complex decision making			Х		
Maintain attention for extended periods	х				
Tolerate distraction in the work environment		х			
Manage time to be punctual		Х			
Take appropriate precautions to workplace hazards	Х				
Maintain an organized workstation or environment		Х			
Job modification(s) related to cognition (choose all that apply):					
Needs written work task available to remember instructions					
Needs to take notes to remember details of non-routine work tasks					х
Requires supervised repetition to learn work tasks					
New tasks should initially have limited steps					
Work tasks should be isolated to one task at a time				х	
Complex problem solving should not be required for any work tasks					
Complex problem solving should only be performed for practiced work tasks					
Needs assistance for all complex problem solving				Х	
Need to limit to one computer monitor to decrease need for multitasking					
Reminders, such as on a cell phone, are needed to manage time and maintain a schedule				х	
Needs a more isolated work area to decrease auditory and visual distraction					
Wear earplugs or earmuffs to decrease auditory distraction					
Needs option to dim light to decrease visual strain, distraction and reduce symptom triggo	ers				х
Needs supervision to create and maintain organization within the work environment					х

Self-Regulation. Jane's interactions with her family and with the general public, such as when doing groceries has gone well. She reports some frustration with tolerating feedback from her spouse when he is noting what he describes as memory challenges and "not being able to figure things out." Because of this she avoided asking for him for help with the taxes until it was absolutely necessary.

Self-regulation Self-regulation	1	2	3	4
Interact with the general public	х			
Interact with coworkers or peers	х			
Responsive to feedback from supervisors	х			
Request assistance when needed		х		
Complete work without interruptions from psychological symptoms	х			
Adhere to basic hygiene and cleanliness standards	х			
Job modification(s) related to self-regulation (choose all that apply):				
Working with the general public should not be an essential job function				
Direct interaction should be with a limited number of coworkers				
Employer performance feedback should be provided in writing at scheduled intervals				
Needs to work with someone to compensate for limited ability to ask for assistance				
Needs supervision with adhering to company hygiene/dress standards				Х

Resilience. Jane has struggled some with lack or routine since being out of work. She has tried to keep herself busy with tasks inside and outside her home. She finds that with trying to be efficient with house chores she becomes fatigued after about 4 hours if she does not take a break with symptoms of fogginess. Being flexible has also been a challenge such as when she needed to go get her son who became sick at school, she is unable to adjust her plan to finish the other tasks she has wanted to do.

Resilience	1	2	3	4	5
Respond flexibly to changes		х			Г
Make and adjust plans independently		Х			
Work with time pressure	х				
Manage daily work demands			Х		
Maintain regular attendance	х				
Learn from adverse events	х				Г
Job modification(s) related to resilience (choose all that apply):					
Needs check-in from supervisor to help process change in the work routine					х
Needs check-in from supervisor to help process adverse events			х		
Working under time pressure should be limited					
Rest breaks are needed. Please specify: She will need a 5 minute rest break ex	ery hour				х
Unable to work consecutive shifts or needs alternate days off					
Please specify:					
Need to limit certain shifts such as day shifts, night shifts, or on-call shifts					
Please specify: She can not work on call considering her ability to be flexible.					

Any other job modification recommendations not listed above: Although Jane has difficulty with asking for assistance with complex tasks, most of her work tasks are straight forward and repetitive. She works in an inpatient unit with a nurse supervisor, which will be sufficient to provide the supervision she needs in the rare case assistance is required.

Mark the appropriate cognitive work capability level (choose all that apply):	
Can work without restrictions	
Modified hours required: Can work4 hours per day5 days per week	
Requires job modifications other than limited hours of work	х
Can tolerate sheltered employment (working with someone) (consider when most answers are 3)	
Can tolerate volunteering	
Does not have a cognitive work capability	
Cognitive work capability will be reassessed on date:4 weeks	

Sources supporting this medical opinion (check all that apply):

Patient interview	Х
Observations during present or past visits	Х
Health care provider evaluation	x
Administration or review of objective cognitive or psychological testing	Х
Discussion with care team or other treating provider	Х
Medical record review	
Review of work history	
Employer report of work performance	

The Montreal Cognitive Assessment (MOCA) version 8.1 was used as an objective cognitive screening test during the visit. Jane scored a 25/30 on this test indicating mild cognitive impairment. She scored a 2 out of 5 on the delayed memory section with an expectation of 3-4 out of 5. She was unable to serial subtract 7 from 100. Observations of slowed processing overall during this task were also made.

While the MOCA was used in this example, objective cognitive testing may not be available or possible during a visit. It is consistent with the design of this form to use best available information.

REFERENCES

- 1 National Academies of Sciences, Engineering, and Medicine 2019. *Functional Assessment for Adults with Disabilities*. Washington, DC: The National Academies Press. https://doi.org/10.17226/25376.
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- 4 Mental Residual Functional Capacity Assessment . Form **SSA-4734-F4-SUP** (8-85) U.S. Government Printing Office: 1989-241-312/80099
- 5 Americans with Disability Act of 1990
- 6 Epic Rehab Doll Chair Assembly Task