

**NINDS CDE Notice of Copyright
ALS Cognitive Behavioral Screen (ALS-CBS)**

Availability:	Please email the authors for information about obtaining the instrument: WoolleS@cpmcri.org
Classification:	Supplemental.
Short Description of Instrument:	<p>Background: Developed as a screen to triage patients who required formal neuropsychological testing. Preliminary cut off scores may be useful to classify patients into subgroups of possible Frontotemporal Dementia (FTD), cognitively impaired, or cognitively normal.</p> <p>Construct measured: Frontal lobe cognitive dysfunction typical in ALS and behavioral changes associated with frontal lobe abnormalities. The test was designed as a screening tool to help identify patients most at risk for FTD and rule out patients with minimal cognitive or behavioral change.</p> <p>Generic vs. disease specific: ALS-specific.</p> <p>Means of administration: The screen can be completed in a routine clinical setting by any member of the care team, verbally or in writing.</p> <p>Intended respondent: Patient (cognitive section) and caregiver (behavioral questionnaire).</p> <p># of items: The measure is composed of 8 cognitive tasks that examine changes in frontal lobe functioning, specifically attention, working memory, ocular function and verbal fluency. It also consists of a 15-item caregiver-rated behavioral change questionnaire.</p> <p># of subscales and names of sub-scales: The cognitive section has 4 subscales: Attention (commands, mental addition/language, eye movements), Concentration (digits backwards), Tracking and Monitoring (months backwards, alphabet and letter-number alternation), and Initiation and Retrieval (F words). The behavioral section has one total score.</p> <p># of items per sub-scale: Attention: 6 items, Concentration: up to 8 items, Tracking/Monitoring: 3 items, Initiation and Retrieval: 1 item.</p> <p>Strengths: Free to use and reproduce, easy to administer, relatively quick, does not require a neuropsychologist or M.D. for administration, can be completed either verbally or in writing, and many items can be completed with eye movements/augmentative communication.</p> <p>Weaknesses: Cannot provide a cognitive diagnosis, does not assess all cognitive domains (i.e. memory, confrontational naming, visuospatial functioning).</p> <p>Administration time: The screen takes approximately 5-10 minutes.</p>

**NINDS CDE Notice of Copyright
ALS Cognitive Behavioral Screen (ALS-CBS)**

<p>Psychometric Properties:</p>	<p>Feasibility: Easy to use, relatively short (5-10 minutes).</p> <p>Reliability: No reliability data published yet.</p> <p><i>Validity:</i> 100% accuracy for detecting ALS-FTD, Cognitively normal ALS patients can be distinguished from those with any cognitive deficit with 71% specificity and 85% sensitivity. The behavioral score predicts ALS-FTD with 80% sensitivity and 88% specificity.</p> <p>Sensitivity to Change: No published data regarding this.</p> <p>Relationships to other variables: Good sensitivity and specificity when compared to comprehensive neuropsychological test battery (gold standard).</p>
<p>Scoring:</p>	<p>The cognitive section results in a total score out of a possible 20 points. Scores are based both on accuracy and errors-made, the latter of which result in deduction of points towards the total score. The behavioral section is a sum of the Likert scale items endorsed.</p>
<p>References:</p>	<p>Key Reference: Woolley, SC, York, MK, Moore, DH, Strutt, AM, Murphy, J, Schulz, PE, Katz, JS. Detecting frontotemporal dysfunction in ALS: Utility of the ALS Cognitive Behavioral Screen (ALS-CBS™). <i>Amyotrophic Lateral Sclerosis</i> 2010; 11(3): 303-311.</p> <p>Other References: Rush, B, Woolley, SC, Boylan, K. <i>Diagnostic Validity of the ALS Cognitive Behavioral Screen</i>. <i>Amyotrophic Lateral Sclerosis</i> 2010; 11 (Supp 1): 33. Platform Presentation, 21st Int'l Symposium on ALS/MND, Orlando, FL.</p>