Instrument	Confusional State Evaluation NOTE: This card is populated with information from the instrument's original validation study only.		
Acronym	CSE		
Primary use	Delirium Severity		
Area assessed (Number of questions)	22 items total, assessing core and associated symptoms, and intensity and duration of episode		
	Core symptoms of confusion (12 items): disorientation, disturbance, concentration, memory, perseveration, impaired contact, delusions, hallucinations	*Associated symptoms (7 items):* irritability, emotional lability, wakefulness disturbance, psychomotor agitation/retardation, mental uneasiness, sleep-wake disturbance	Intensity and duration of delirious episode (3 items)
Description	Observational delirium severity and screening tool that is based on a patient's condition during a brief interview – additional information can be sought from patient's clinical staff or family. For such additional information, such as disturbance of sleep-wake pattern, a predetermined observation period should be specified to the patient's clinicians or family. As delirium severity can fluctuate, observation periods should not be too long. The CSE can be repeated at multiple points to follow fluctuations in delirium severity over time.		
Versions	1		
Scoring information	Items are scored on a scale of 0-4 with half-points allowed. Scores from 12 Core Symptom items are summed to give a "confusion score," while remaining 10 items are evaluated individually.		
Cognitive testing	Not specified or required; can be used to assist interview and in scoring instrument		
Estimated time to rate	<30 minutes		
Require trained rater	Yes – designed to be used by trained nurses, doctors, psychologists with good knowledge of dementia and delirium in elderly populations; training on use of the scale is necessary		
Administer to	Patient, in-person		
How to obtain	Scale available at: https://www.karger.com/Article/Pdf/17173		
Licensing Fee*	None		
Languages available	English		
Highest COSMIN** rating	5/6		
Test Performance Characteristics	**Robertsson 1997** •Reliability (inter-rater), "confusion score" subscore of CSE scale [items 1-9, 16-18] Spearman rank order correlation coefficient 0.89; weighted kappa coefficients 0.58 •Construct validity ("Confusion score" compared to global rating score given by psychogeriatrician, r=0.79; compared to Mini-Mental State Examination [MMSE], r=-0.87; compared to various items of Gottfries-Brane-Steen Scale [GBS], r=0.59-0.78) •Internal validity (Correlation between individual items in "confusion score" and total confusion score, mean=0.69) •Sensitivity to change (Correlation of change in "confusion score" over three weeks of pharmacological treatment to change in Clinical Global Impression scale for Improvement [CGI Improvement], r=0.75)		

* Fees and licensing information is effective as of 2018, but is subject to change over time

Reference:

Robertsson, B., Karlsson, I., Styrud, E., Gottfries, C.G. (1997). Confusional State Evaluation (CSE): an instrument for measuring severity of delirium in the elderly. Br J Psychiatry, 170:565-70. doi:10.1192/bjp.170.6.565

** COSMIN is used to rate a study's evaluation of a survey or test's measurement properties. COSMIN does NOT rate the instrument itself, but helps readers understand if they can have confidence in the results of studies evaluating measurement properties of surveys and tests. For example, a rigorous study evaluating a test with poor measurement properties will receive a "good" COSMIN rating, while a poorly-conducted study evaluating a test with good measurement properties will receive a "poor" COSMIN rating. Small sample size can impact all COSMIN ratings. You must consider both the COSMIN rating and the results of studies provided when forming your opinion about that test. *COSMIN ratings shown are based solely on the instrument's original validation study.*

Additional Reference:

Robertsson, B. (1999). Assessment scales in delirium. *Dementia and geriatric cognitive disorders*, *10*(5), 368-379. (scale included in appendix).

Reviews:

Adamis, D., Sharma, N., Whelan, P.J.P., Macdonald, A.J.D. (2010). Delirium scales: A review of current evidence. *Aging & Mental Health*, 14(5):543-55. doi:10.1080/13607860903421011