Instrument	Delirium Index
	NOTE: This card is populated with information from the instrument's original validation study only.
Acronym	DI, DIDX
Primary use	Delirium Severity
Area assessed (Number of	7 areas assessed: disorders of attention, thought, consciousness, orientation, memory,
questions)	perception, psychomotor activity; 7 items total
Description	Observational delirium severity scale that does not require additional information from family members, clinical staff, or medical records; meant to be used in conjunction with the Mini-Mental State Examination (MMSE) and requires use of at least the first five questions of MMSE (can be substituted with similar questions from another cognitive screening tool). DI can be rated one or more times daily.
Versions	1
Scoring information	Each area scored on a scale from 0 (absent) to 3 (present and severe) using operational criteria for each score; total scores range from 0-21 with higher scores indicating higher severity. DI items are scored in conjunction with MMSE (or equivalent cognitive testing questions).
Cognitive testing	DI requires use of the MMSE or another cognitive screening tool to provide a basis for
	observation; at least the first five questions of MMSE constitute the basis of ratings.
Estimated time to rate	10 mins (estimate)
Require trained rater	Yes – clinician or trained lay rater
Administer to	Patient, in-person
Special resources required	MMSE instrument – copyright restrictions apply, see below for details to obtain. MMSE can be substituted with a similar cognitive screening tool.
How to obtain	Available for download at <u>http://dx.doi.org/10.1111/j.1532-5415.2004.52471.x</u> (Note: article may be located behind paywall). MMSE available at https://www.parinc.com/products/pkey/237
Licensing Fee*	None for instrument; MMSE has licensing fee for use (see link above).
Languages available	English, French
Highest COSMIN** rating	5.5/6 <sup>†</sup>
Test Performance	McCusker 2004
Characteristics	<ul> <li>Reliability (internal consistency, Cronbach's alpha 0.74; inter-rater, intraclass correlation efficient 0.98)</li> <li>Convergent validity (Compared to MMSE, Spearman correlation coefficients [delirium</li> </ul>
	and dementia patients -0.83; delirium patients only -0.79; dementia patients only -0.78; neither delirium nor dementia -0.66)
	•Responsiveness (Standardized response mean in delirious patients with dementia/delirious patients without dementia [8-week follow up, -0.64/-0.64; 6 months -0.45/-0.81; 12 months -0.34/-0.51])

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

## **Reference:**

080

McCusker, J., Cole, M.G., Dendukuri, N., Belzile, E. (2004). The Delirium Index, a Measure of the Severity of Delirium: New Findings on Reliability, Validity, and Responsiveness. Journal of the American Geriatrics Society, 52:1744-9. doi:10.1111/j.1532-5415.2004.52471.x

Last updated on May 14, 2018. If you are aware of any updates required for this document, please notify us via nidus@hsl.harvard.edu





Page 1 of 2

\*\* 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 poorlyconducted 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.* 

<sup>+</sup> COSMIN breakdown: inter-rater reliability: FAIR, content validity: GOOD, construct validity: GOOD, external validity: GOOD, internal consistency: GOOD, effect indicators: GOOD

## **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

Last updated on May 14, 2018. If you are aware of any updates required for this document, please notify us via nidus@hsl.harvard.edu



This work was created by the NIDUS Measurement and Harmonization Core (Leaders Richard N. Jones, ScD and Dale M. Needham, MD, PhD), funded by NIA R24AG054259, and is licensed under the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License. To view a copy of this license, visit <u>http://creativecommons.org/licenses/by-nc-sa/4.0/</u>. Requested citation: NIDUS-Network for Investigation of Delirium: Unifying Scientists, https://deliriumnetwork.org/

