

Instrument	Delirium Severity Scale NOTE: This card is populated with information from the instrument's original validation study only.
Acronym	DSS
Primary use	Delirium Severity
Area assessed (Number of questions)	2 cognitive tests - Forward Digit Span and Similarities
Description	An assessment of delirium severity based on a combination of modified Forward Digit Span and Similarities tests. A separate diagnostic instrument must be used for case ascertainment. DSS can be rated one or more times daily.
Versions	1
Scoring information	Raw scores from the modified Forward Digit Span and Similarities tests are added to form the DSS score.
Cognitive testing	Modified Forward Digit Span and Similarities, no additional testing required.
Estimated time to rate	10 minutes
Require trained rater	Yes – trained lay raters or clinicians
Administer to	Older adults without dementia, general inpatient setting
How to obtain	Scale information available at: https://doi.org/10.1097/00019442-199800640-00005 (Note-article may be behind paywall). Digit Span and Similarities subtests available from Wechsler Adult Intelligence Scale (WAIS), see link below.
Licensing Fee*	Licensing fees are required for the WAIS: https://www.pearsonclinical.com/psychology/products/100000392/wechsler-adult-intelligence-scale-fourth-edition-wais-iv.html
Languages available	English
Highest COSMIN** rating	In progress
Test Performance Characteristics	Bettin 1998 <ul style="list-style-type: none"> •Reliability (inter-rater, correlation coefficient=0.99) •Concurrent validity (Correlation with quantitative geriatric psychiatrist ratings of delirium severity; $r=-0.50$ [$p=0.02$] at 1-12 hours post-enrollment; $r=-0.44$ [$p=0.05$] at 24-42 hours post-enrollment; $r=-0.52$ [$p=0.02$] at 2-14 days post-enrollment) •Discriminant validity (Scores compared to non-delirious patients; 14.8 ± 7.9 vs. 36.5 ± 8.2 [$p<0.001$] at 1-12 hours post-enrollment; 22.3 ± 9.1 vs. 37.7 ± 8.2 [$p=0.057$] at 2-14 days post-enrollment)

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

** 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.*

Reference:

Bettin, K. M., Maletta, G. J., Dysken, M. W., Jilk, K. M., Weldon, D. T., Kuskowski, M., & Mach, J. R. (1998). Measuring delirium severity in older general hospital inpatients without dementia: the Delirium Severity Scale. *Am J Geriatr Psych*, 6(4), 296-307.

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 <http://creativecommons.org/licenses/by-nc-sa/4.0/>. Requested citation: NIDUS-Network for Investigation of Delirium: Unifying Scientists, <https://deliriumnetwork.org/>

