Instrument	Nursing Delirium Screening Scale
	NOTE: This card is populated with information from the instrument's original validation study only.
Acronym	Nu-DESC
Primary use	Delirium Screening
Area assessed (Number of	5 areas assessed: disorientation, inappropriate behavior, inappropriate communication,
questions)	illusions or hallucinations, and psychomotor retardation
	5 items total
Description	A screening tool designed for nurses to use at the end of their shift to identify patients with delirium, derived from the Confusion Rating Scale (CRS). Raters reference behaviors that they have witnessed in the patient or that the patient's nurse has witnessed during their shift to score the Nu-DESC. The Nu-DESC can be rated one or more times daily.
Versions	1
Scoring information	Each feature is scored on 0-2 based on severity, with 0=absent, 1=mild, and 2=severe.
	Positive Nu-DESC is score ≥2, maximum total score is 10.
Cognitive testing	Not included or required
Estimated time to rate	1-2 mins; based on 8-hour periods of observation (nursing shift)
Require trained rater	Yes – trained lay rater or clinician
Administer to	Patient, in-person
How to obtain	Instrument and instructions available at
	http://dx.doi.org/10.1016/j.jpainsymman.2004.07.009
Licensing Fee*	None
Translations	German, Chinese, Korean, Italian, Swedish, Portuguese (Brazil), Finnish, Danish
Highest COSMIN** rating	Overall: 2.5/6 <sup>†</sup>
Test Performance	Gaudreau 2005 (Journal of Pain and Symptom Mangement)
Characteristics	•Sensitivity (Compared to Confusion Assessment Method [CAM] administered by trained
	research nurses 0.86 [95% CI 0.65-0.95]) COSMIN: FAIR
	•Specificity (Compared to CAM 0.87 [0.73-0.94]) COSMIN: FAIR
	<ul> <li>Efficiency (Compared to CAM 0.86 [0.76-0.93]) COSMIN: FAIR</li> </ul>

\* 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 "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 when forming your opinion about that test. *COSMIN ratings shown are based solely on the instrument's original validation study*.

+ COSMIN breakdown: internal consistency: NONE, inter-rater reliability: NONE, construct validity: FAIR, external validation: NONE, content validity: GOOD, internal consistency: GOOD

## **Reference:**

Gaudreau, J-D., Gagnon, P., Harel, F., Roy, M-A. (2005) Impact on delirium detection of using a sensitive instrument integrated into clinical practice. General Hospital Psychiatry, 27:194-199. Doi:10.1016/j.genhosppsych.2005.10.002

## Additional Test Performance Characteristics: Gaudreau 2005

•Sensitivity Ratio relative to CAM (Compared to CRS 1.125 [1.05-1.20]; DSM-IV 0.947 [0.84-1.06]; MDAS 0.900 [0.75-1.05])

•Specificity Ratio relative to CAM (compared to CRS 1.065 [1.04-1.09]; DSM-IV 0.868 [0.81-0.93]; MDAS 0.971 [0.91-1.03])

## 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/



## **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

Brooks, P. B. (2012). Postoperative delirium in elderly patients. *AJN The American Journal of Nursing*, 112(9), 38-49.

De, J., Wand, A.P.F. (2015). Delirium Screening: A Systematic Review of Delirium Screening Tools in Hospitalized Patients. *The Gerontologist*, 55(6):1079-1099. doi:10.1093/geront/gnv100

Gélinas, C., Bérubé, M., Chevrier, A., Pun, B. T., Ely, E. W., Skrobik, Y., & Barr, J. (2018). Delirium Assessment Tools for Use in Critically III Adults: A Psychometric Analysis and Systematic Review. *Critical care nurse*, *38*(1), 38-49.

Jones, S. F., & Pisani, M. A. (2012). ICU delirium: an update. *Current opinion in critical care*, 18(2), 146-151.

Leonard, M. M., Nekolaichuk, C., Meagher, D. J., Barnes, C., Gaudreau, J. D., Watanabe, S., ... & Lawlor, P. G. (2014). Practical assessment of delirium in palliative care. *Journal of pain and symptom management*, *48*(2), 176-190.

Luetz, A., Heymann, A., Radtke, F. M., Chenitir, C., Neuhaus, U., Nachtigall, I., ... & Wernecke, K. D. (2010). Different assessment tools for intensive care unit delirium: which score to use?. *Critical care medicine*, *38*(2), 409-418.

Neto, A.S., Nassar, A.P. Jr., Cardoso, S.O., Manetta, J.A., Pereira, V.G.M., Esposito, D.C., Damasceno, M.C.T., Slooter, A.J. (2012). Delirium screening in critically ill patients: A systematic review and meta-analysis. *Crit Care Med*, 40(6): 1946-1951. doi:10.1097/CCM.0b013e31824e16c9

Radtke, F. M., Franck, M., Schust, S., Boehme, L., Pascher, A., Bail, H. J., ... & Spies, C. D. (2010). A comparison of three scores to screen for delirium on the surgical ward. *World journal of surgery*, *34*(3), 487-494.

Van Velthuijsen, E.L., Zwakhalen, S.M., Warnier, R.M., Mulder, W.J., Verhey, F.R., Kempen, G.I. (2016). Psychometric properties and feasibility of instruments for the detection of delirium in older hospitalized patients: a systematic review. *Int J Geriatr Psychiatry*, 31(9):974-89. doi:10.1002/gps.4441

Wong, C. L., Holroyd-Leduc, J., Simel, D. L., & Straus, S. E. (2010). Does this patient have delirium?: value of bedside instruments. *Jama*, *304*(7), 779-786.

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



