

Instrument	Chart-based Delirium Identification Instrument NOTE: This card is populated with information from the instrument's original validation study only.
Acronym	CHART-DEL
Primary use	Delirium identification
Area assessed (Number of questions)	Addresses 4 core features: Acute onset or fluctuating course; Inattention; Disorganized thinking; Altered level of consciousness 7 items
Description	A chart-based instrument for identification of delirium with the goal of maximizing sensitivity. Chart review includes searching for key terms for identification of delirium, particularly searching for any evidence of acute mental status change. If delirium is present, the following is recorded: sources of information (nurse, physician, other), approximate time of onset and duration, detailed description of each episode (verbatim), and evidence of reversibility or improvement during hospitalization
Versions	1
Scoring information	Chart-review classification of delirium into "Definite" (diagnosis is unequivocal; confirmed diagnosis made by an experienced reference standard rater), "Probable" (All CAM features are present in the notes or Acute onset of disorientation or hallucinations), "Possible" (Not all CAM features are present, but >1 feature, plus other supporting features), or "Uncertain" (no description, no details about the confusion, and the next day no further comment).
Cognitive testing	Not needed
Estimated time to rate	15-30 minutes chart review of hospitalization
Require trained rater	Yes – trained clinical chart abstractors (nurses, physicians, or other)
How to obtain	Detailed instructions (registration required) at https://help.agscocare.org/
Licensing Fee*	None for non-profit or educational use
Languages available	English
Highest COSMIN** rating	3.5/6 [†]
Test Performance Characteristics	<p>Inouye 2005 (Study: 919 general medicine patients age ≥ 70)</p> <ul style="list-style-type: none"> •Reference Standard: trained interviewer ratings for delirium based on the Confusion Assessment Method (CAM) •Sensitivity/Specificity: 0.74 (95% CI=65–81)/0.83 (95% CI=80–86) •Positive predictive value: 39% (95% CI=32–45) •Negative predictive value: 96% (95% CI=94–97) •Inter-rater reliability: Kappa statistic=0.41 (95% CI=0.34–0.48)

* Fees and licensing information is effective as of 2021, 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.*

† COSMIN breakdown: content validity: GOOD, effect indicators: GOOD, internal consistency: NONE, inter-rater reliability: FAIR, construct validity: NONE, external validity: GOOD

Last updated on **July 29, 2021**. If you are aware of any updates required for this document, please notify us via nidus@hsl.harvard.edu



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Reference:

Inouye SK, Leo-Summers L, Zhang Y, Bogardus Jr ST, Leslie DL, Agostini JV. A chart-based method for identification of delirium: validation compared with interviewer ratings using the confusion assessment method. *Journal of the American Geriatrics Society*. 2005;53(2):312-8.

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