Instrument	Ultra-Brief 2-item Screener
Acronym	UB-2
Core Domain	Delirium Screening
Area assessed (Number of questions)	Orientation and attention 2 items
Description	The Ultra-Brief 2-Item Screener (UB-2) is a clinician-administered two-item interview designed for large-scale delirium case identification. The two items are "please tell me the day of the week", and "please tell me the months of the year backwards, say December as your first month."
Versions	1
Scoring information	If the patient gets both items correct, the screen is negative for delirium. If one or both items are incorrect, then this is a positive screen. For the months of the year backwards, answer is incorrect if one or more months are missed, the patient gives the wrong type of answer after one re-read of instructions, or if the patient cannot answer at all after two prompts.
Cognitive testing	2 brief items
Estimated time to rate	< 1 minute
Require trained rater	Yes, physicians, nurses, and nursing assistants
Administer to	Patient
Special resources required	A "positive screen" (either item incorrect) requires a more thorough diagnostic interview; the instrument developers recommend the 3D-CAM or CAM.
How to obtain	Pocketcard of instrument with instuctions and a free video for training is available at: www.nursing.psu.edu/readi
Licensing Fee*	None
Languages available	English
Highest COSMIN rating**	In progress
Test Performance Characteristics	**Fick 2015 (n=201) hospitalized patients, reference standard: clinical interview by neuropsychologist or advanced practice nurse followed by adjudication from expert panel, including geriatrician. Note this sample was the derivation sample for UB-2 item choices.** •Sensitivity: 93% [95% CI 81-99%] •Specificity: 64% [95% CI 56-70%]

* Fees and licensing information is effective as of March 2019, 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.*

References: Fick DM, Inouye SK, Guess J, Ngo LH, Jones RN, Saczynski JS, Marcantonio ER (2015). Preliminary development of an ultrabrief two-item bedside test for delirium. Journal of Hospital Medicine 10:645-650. [COSMIN reference]

Fick DM, Inouye SK, McDermott C, Zhou W, Ngo L, Gallagher J, McDowell J, Penrod J, Siuta J, Covaleski T, Marcantonio ER (2018). Pilot study of a two-step delirium detection protocol administered by certified nursing assistants, physicians, and registered nurses. Journal of Gerontological Nursing 44(5):18-24

Last updated on **May 21, 2019.** If you are aware of any updates required for this document, please notify us via nidus@hsl.harvard.edu

Subgroup analyses of sensitivity/specificity:

Sensitivity:

- With dementia: 96%
- Without dementia: 86%

Specificity

- With dementia: 43%
- Without dementia: 69%

Fick 2018 (n=23)

- Sensitivity: UB-2 + 3D-CAM (by physician 80%; by RN 100%)
- Specificity: UB-2 + 3D CAM (by physician 83%; by RN 89%)
- Positive Predictive Value: UB-2 + 3D CAM (by physician 57%; by RN 71%)
- Negative Predictive Value: UB-2 + 3D CAM (by physician 94%; by RN 100%)