

ENA CLINICAL PRACTICE GUIDELINE SYNOPSIS: SCREENING OLDER ADULTS FOR COGNITIVE IMPAIRMENT



Clinical Question

Which assessment tools are valid and reliable for the determination of cognitive impairment in patients 65 years and older in the emergency department?

Problem

Cognitive impairment in patients 65 years and older is common in the emergency department ([Parke et al, 2011](#)). Cognitive impairment in older adults increases the complexity and risk of adverse outcomes (eg, mortality) after ED discharge ([LaMantia et al, 2014](#)). Cognitive impairment encompasses both dementia and delirium because it is not always possible to differentiate between the 2 in the ED setting and the 2 conditions may coexist. Dementia is a

chronic, irreversible, neurodegenerative disease characterized by loss of memory and impaired reasoning. Dementia is caused by many different disease processes such as Alzheimer's, Lewy body, vascular, frontotemporal, and mixed diseases. Screening tools do not diagnosis dementia; they only indicate that cognitive impairment is present. Delirium is an acute, reversible alteration in cognitive function with many possible etiologies including physical illness, psychiatric conditions, and medications ([Parke et al, 2011](#)). Unfortunately, cognitive impairment, either delirium or dementia, frequently goes unrecognized in the emergency department because cognitive function is not routinely assessed ([Arendts et al, 2017](#); [Han et al, 2009](#); O'Regan et al, 2012; [Sendekci, 2014](#)). In one study, emergency physicians' clinical assessment was only 35% sensitive in the detection of delirium ([Élie et al, 1998](#)). Other studies have concluded that 65% to 75% of patients with delirium may be under-identified by emergency physicians ([LaMantia et al, 2014](#); [Suffoletto et al, 2013](#)). Screening is recommended to detect impaired mental status (eg, delirium or dementia), because cognitive impairment affects disposition decision making and appropriate clinical interventions ([Parke et al, 2011](#); [Taylor et al, 2018](#)). In the ED setting, use of a screening tool that is valid, reliable, simple, and easily used by emergency nurses and providers is important ([Arendts et al, 2017](#)).

Recommendations

Description of Decision Options/Interventions and the Level of Recommendation	
The Short Blessed Test (SBT; also known as the Orientation-Memory-Concentration Test, Quick Confusion Scale [QCS] and the 6 item Cognitive Impairment Test [6-CIT]) is sensitive but not specific in the detection of cognitive impairment (Barbic et al., 2018 ; Carpenter et al., 2011 ; Carpenter et al., 2019 ; Huff et al., 2001 ; O'Sullivan et al., 2017).	B
The Ottawa 3DY (O3DY) Scale is sensitive but not specific in the detection of cognitive impairment (Bédard et al., 2019 ; Carpenter et al., 2019 ; Eagles et al., 2019).	C
The Abbreviated Mental Test 4 (AMT-4) is specific but not sensitive in the detection of cognitive impairment (Dyer et al., 2017 ; Carpenter et al., 2019 ; Schofield et al., 2010).	C
The Six-Item Screener (SIS) is specific but not sensitive in the detection of cognitive impairment (Carpenter et al., 2019 ; Carpenter et al., 2011).	C
The Brief Confusion Assessment Method (bCAM) is sensitive and specific in the of detection cognitive impairment (Baten et al., 2018 ; Han et al., 2013).	INE
There is insufficient evidence to support the use of the following tools to detect cognitive impairment: • 4 As Test and 4 As Test-French (4AT, 4AT-F) (Gagne et al., 2018; O'Sullivan et al., 2017) • Alzheimer's Disease 8 (AD8), caregiver or patient completed (cAD8, pAD8) (Carpenter, DesPain, et al., 2011; Carpenter, Bassett, et al., 2011; Carpenter et al., 2019) • Bergman-Paris Question (BPQ) (Laguë et al., 2018) • Brief Alzheimer's Screen (BAS) (Carpenter, Bassett et al., 2011) • Confusion Assessment Method-Intensive Care Unit (CAM-ICU) (Han, Wilson, et al., 2014) • Delirium Triage Screen (DTS) (Han et al., 2013) • German Nursing Delirium Screening Scale (Nu-DESC) (Brich et al., 2019) • Modified versions of the CAM or bCAM (Han et al., 2016; Han et al., 2018; Hasemann et al., 2018) • Modified Richmond Agitation Sedation Scale (mRASS) (Grossman et al., 2017) • Month of Year Backward Test (MOTYB, also known as Months Backward Test [MBT]) (Hasemann et al., 2019; Marra et al., 2018) • Predicting Emergency department Delirium with Interactive Computer Tablet game (PrEDICT) (Lee et al., 2019) • Richmond Agitation Sedation Scale (RASS) (Han et al., 2015)	INE
There is insufficient evidence to support the use of a chief complaint "altered mental status" to determine cognitive impairment (Han, Schnelle, et al., 2014).	INE
There is insufficient evidence for the feasibility and acceptability of cognitive impairment screening (Baten et al., 2018 ; Barbic et al., 2017 ; Carpenter, Bassett, Fischer et al., 2011 ; Dyer et al., 2017 ; Eagles et al., 2019 ; Han et al., 2009 ; Han et al., 2013 ; Han et al., 2016).	INE

Level A	Based on consistent and good quality of evidence; has relevance and applicability to emergency nursing practice.
Level B	There are some minor inconsistencies in the quality of evidence; has relevance and applicability to emergency nursing practice.
Level C	There is limited or low-quality patient-oriented evidence; has relevance and applicability to emergency nursing practice.
NR	Not recommended based upon current evidence.
INE	Insufficient or no evidence upon which to make a recommendation.

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