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COGNITIVE ASSESSMENT SCREENING TOOLS FOR USE IN PRIMARY CARE



Alzheimer's disease (AD) is the most common cause of dementia.[1] Routine cognitive assessments may facilitate the timely detection of patients with early changes consistent with MCI. Although no single tool is recognized as the "gold standard" for detecting cognitive impairment, routine cognitive assessment in primary care can provide a baseline for cognitive surveillance or a trigger for further evaluation.[2-4]

CONSIDERATIONS FOR SELECTING ASSESSMENT TOOLS[1,2,5]

Duration of Assessments
The shortest assessments may take 2-3 minutes, while others may take 10-15 minutes or even longer

Ease of Use/Accessibility
Digital assessments may be more user-friendly and accessible, especially for individuals who have difficulty traveling to or accessing traditional testing facilities

Quality of the Tool
Sensitivity to early stages of decline, validation in a primary care or community setting, validated in diverse populations, and ease of interpretation of results

Administration
Assessments vary in complexity and training required. Some may be self-reported, whereas others are administered by an HCP and some by non-licensed personnel

Individual Patient Characteristics
Some tools are available in multiple languages or designed to minimize cultural or educational bias

Cost/Other Administrative Issues
Is the tool freely available to use, or are there any copyright restrictions or associated costs? How difficult/burdensome is any required training?

EXAMPLES OF BRIEF AND DIGITAL COGNITIVE ASSESSMENT TOOLS[a]

Brief Cognitive Assessment Tools

Brief Cognitive Assessment	No.of Items	Time Taken (min)	Score Range	Interpretation of Scores	Cognitive Domains Accessed: Memory	Focus and Working Memory	Orientation	Language	Visuospatial	Executive Function
MMSE[1,6-8]	30	5-10	0-30	23 or 24 points: Most reported thresholds for cognitive impairment or dementia	✓	✓	✓	✓	✓	-
MoCA[1,2,9]	12	~10	0-30	Recommended cutoff of <26: Detection of MCI & dementia[b]	✓	✓	✓	✓	✓	✓
Mini-Cog[1,2,10,11]	3	~3	0-5	≥3: Lower likelihood of dementia[c] ≤2: Higher likelihood of clinically important cognitive impairment	✓	-	-	-	✓	✓
SLUMS[2,3,12]	11	~7	1-30[d]	≥27: Normal cognition | 21-26: Mild cognitive impairment | <21: Dementia	✓	✓	✓	-	-	✓
MIS[2,13,14]	4	4	0-8	≤4 or ≤5 points: Reported thresholds for cognitive impairment or dementia	✓	-	-	-	-	-

Digital Cognitive Assessment Tools

Digital Cognitive Assessment	Time Taken (min)	Score Outputs	Cognitive Domains Assessed: Visual Memory	Working Memory	Attention	New Learning/ Visual Learning	Psychomotor Function (processing speed & accuracy)
CANTAB (Mobile®) (CANTAB-PAL)[e,15-18]	8	Overall test accuracy, number of trials to locate patterns, memory scores, and stages completed	✓	-	-	✓	-
CognICA[19,20]	5	Processing speed and accuracy; probability of cognitive impairment	-	-	-	-	✓
Cognigram[21-23]	10-15	Overall test accuracy and performance speed are calculated	-	✓	✓	✓	✓

No clinic time required for tests mentioned in above digital cognitive assessment tools. The testing can be completed online.

Although no single tool is recognized as the "gold standard" for detecting cognitive impairment, cognitive assessments in primary care can provide a baseline for your patients or prompt the need for further evaluation.[2-4]

Disclaimer: This information is commissioned by Lilly Medical and is intended to be used by HCPs for medical, scientific, and educational purposes. Not for promotional use.

Notes: All assessments are administered to the patient. All Digital Cognitive Assessments included have been cleared for marketing by the FDA, do not require a device or special equipment to administer, and take 15 minutes or less for the patient to complete.[24] [a]This is not an exhaustive list of all of the cognitive assessment screening tools available for use in clinical practice. [b]Proposed ranges by severity: 18-25: mild cognitive impairment; 10-17: moderate cognitive impairment; <10: severe cognitive impairment. These score ranges have not yet been validated.[25] [c]Does not rule out some degree of cognitive impairment. [d]For individuals with less than high school education, 25-30: normal cognition; 20-24: mild neurocognitive disorder; <20: dementia.[2,12] [e]CANTAB-PAL is a brief stand-alone portion of the much larger CANTAB battery. Within CANTAB, the CANTAB-PAL has the most validation in Alzheimer's disease and related disorders.[18]

Abbreviations: AD=Alzheimer's Disease; CANTAB=Cambridge Neuropsychological Test Automated Battery; CANTAB-PAL=CANTAB-Paired Associates Learning; CognICA=Cognetivity's Integrated Cognitive Assessment; HCP=Healthcare Provider; MCI=Mild Cognitive Impairment; Mini-Cog=Mini-Cognitive Assessment Instrument; MIS=Memory Impairment Screen; MMSE=Mini-Mental State Examination; MoCA=Montreal Cognitive Assessment; MS=Multiple Sclerosis; SLUMS=Saint Louis University Mental Status Examination.

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