

*This decision support tool is provided solely for guidance, does not replace a professional's judgment and can be adapted to institutional circumstances. The recommendations were developed using a systematic approach supported by the scientific literature and the knowledge and experience of Québec clinicians and experts. For further details, go to [inesss.qc.ca](http://inesss.qc.ca).*

## Elements to consider when administering screening tools



### For health and social services professionals

- ▶ Only professionals with the necessary skills can administer screening tools and interpret the results in accordance with the current standards and their area of practice.
- ▶ The use of screening tools **should be adjusted** according to:
  - The patient's symptoms;
  - The available time;
  - The specific skills that might be required for using the tools, for scoring and for interpreting the results.
- ▶ Using screening tools is part of the process leading to the diagnosis, and they should **not be used in an isolated manner**.
- ▶ The diagnosis cannot be made solely on the basis of raw scores with no further clinical contextualization.
- ▶ Using certain tools repeatedly ( $\leq 6$  months) can lead to a **learning effect**, especially in patients with a previously high level of functioning<sup>1</sup> or a mild NCD.
- ▶ If it is suspected that the patient knows the contents of a given tool, consider using **replacement versions**, if available.
- ▶ Psychometric screening tools can be used to confirm the presence of NCDs, but they are **not designed to draw any conclusions about the nature** of cognitive function impairments.



### Factors that can influence the performance of screening tools

The factors that can influence the performance of screening tools should be taken into consideration when interpreting the results. These factors are as follows:

- ▶ The patient's level of education and cultural or linguistic group;
- ▶ A severe psychiatric illness that has persisted over the years;
- ▶ Physical problems (handicap or paralysis) or movement limitations (e.g., arthritis of the fingers);
- ▶ The patient's emotional state during the screening (e.g., first-visit anxiety and depression);
- ▶ Previously existing language disorders (e.g., stuttering);
- ▶ Uncorrected sensory impairments (hearing\* or visual);
- ▶ The patient's level of vigilance or cooperation;
- ▶ The use of medications that can have an effect on cognitive functions;
- ▶ The surroundings in which the tools are administered.

\* Age-related hearing loss (presbycusis) is often underestimated by the patient or those around them and can have a considerable impact on the patient's performance.



### For health and social services professionals

Check that:

- ▶ The patient is sufficiently stable from a **medical and pharmacological standpoint**<sup>2</sup>;
- ▶ The screening tools are administered in a **quiet environment with no noise or distractions**;
- ▶ The patient's **hearing, vision and motor activity** are optimal.

**NOTE :** If the patient is found to have a hearing or visual impairment when a screening tool is being administered, it should, if possible, be corrected with the use of an appropriate hearing aid, a personal amplifier or corrective lenses.

<sup>1</sup> The previous level of functioning is defined in terms of education > 12 years, postsecondary education, the type of work, intellectual and cultural interests, etc.

<sup>2</sup> It is advisable to talk with the pharmacist, who will generally have the patient's complete medication file containing all the information regarding their medications.

## Assessment of functional autonomy

### ✓ Rapid screening tools

For rapid screening, check with the patient or caregiver (to the extent possible) if:

- ▶ In the past few months, either has noticed a deterioration or significant changes in the performance of **simple tasks or in the activities of daily living** (neglecting personal hygiene, wearing the same or seasonally inappropriate clothes, problems with managing urinary incontinence, etc.);
- ▶ In the past few months, either has noticed a deterioration or significant changes in the performance of **complex tasks or the instrumental activities of daily living** (difficulty learning and getting acquainted with the use of new devices, such as a remote control or an automatic teller machine, difficulty managing medications, difficulty preparing meals, difficulty doing housework, difficulty managing ordinary finances, etc.).

#### If a **change** has been noticed:

- ▶ Have the caregiver complete a questionnaire that gives a general idea of the loss of functional autonomy and serves to guide the discussion, such as:
  - [The Pfeffer Functional Activities Questionnaire \(FAQ\)](#);
  - [The Disability Assessment for Dementia \(DAD\)](#).

#### If **no change** has been noticed by the patient or caregiver:

- ▶ Assess the patient's functional autonomy again during the annual follow-up, or earlier if there is a specific need to do so.

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## Assessment of cognition



### For health and social services professionals

- ▶ **Rapid psychometric screening tools (Dubois' 5-word test, the Memory Impairment Screen (MIS) or the clock test; administration time: 5 minutes)** are useful:
  - For providing **summary information** about **cognitive functions**;
  - For **quickly detecting** an NCD in at-risk patients with warning signs;
  - If **there is a limited amount of time with the patient** (e.g., suspicion/complaint at the end of a medical visit, a follow-up visit for a chronic illness, a home visit or a visit to a health service, such as audiology or ophthalmology).
- ▶ **Time permitting (> 10 minutes), preference should be given** to using a **more comprehensive psychometric screening** tool (the Modified Mini-Mental State (3MS) examination, the Mini-Mental State Examination (MMSE) or the Montreal Cognitive Assessment (MoCA)) over rapid psychometric screening tools.

### ✓ Rapid psychometric screening tools

- ▶ The use of rapid psychometric screening tools is optional and is left to the professional's judgment according to the clinical context and the time available with the patient.

- ▶ Increase sensitivity and permit the objective assessment of several cognitive functions by combining:

[Dubois' 5-word test](#)  
and  
[the clock test](#)

OR

[The MIS](#)  
and  
[the clock test](#)

- ▶ Use Dubois' 5-word test and the MIS to quickly detect any **memory problems**.
- ▶ Use the clock test to detect other types of impairments, such as **visuospatial<sup>1</sup> and/or executive function** impairments (e.g., organization and planning).
- ▶ **Depending on the results**, the patient's profile, the professional who administered the screening tools and their level of suspicion, the patient should be **seen again by a family physician or an interdisciplinary primary care team** for a detailed evaluation using **more-comprehensive screening tools** (the MMSE, MoCA or MIS).

1. Visuospatial functions play a role in visually determining the relative positions of objects in one's environment or in relation to oneself.

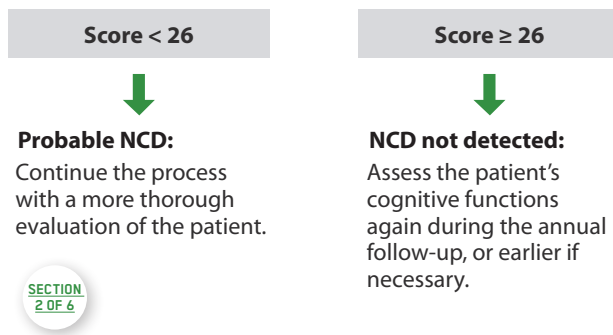
## Assessment of cognition (Cont'd)



### More-comprehensive psychometric screening tools: MoCA

Preference should be given to using the **MoCA**:

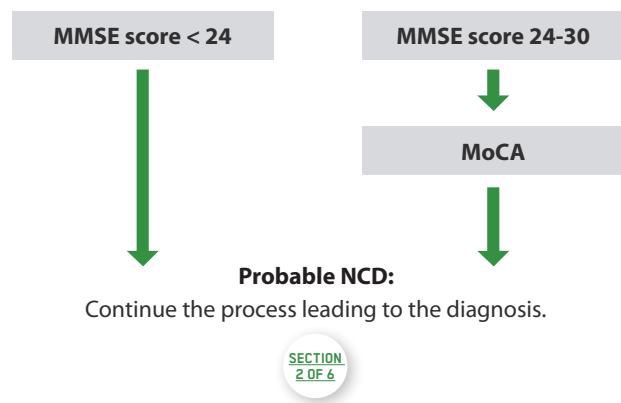
- ▶ In patients with a previously high level of functioning (education > 12 years, postsecondary education, the type of work, intellectual and cultural interests, etc.);
- ▶ If an NCD is suspected in a patient with no significant functional autonomy impairment;
- ▶ When there is some question about the integrity of the patient's cognitive functions and when the MMSE score is within the normal range (24 to 30);
- ▶ To monitor the course of the disease after the diagnosis is made.



### More-comprehensive psychometric screening tools: the MMSE and the 3MS

Preference should be given to using the **MMSE or 3MS mental status** scale:

- ▶ In patients with a low level of education;
- ▶ If an NCD is suspected in a patient with a loss of functional autonomy;
- ▶ To monitor the course of AD from the mild to moderate stage;
- ▶ To evaluate the effectiveness of a pharmacological treatment and to ensure coverage of the drugs by the Régie de l'assurance maladie du Québec (RAMQ), if indicated.



The **3MS** scale:

- ▶ Permits a more detailed screening of cognitive functions (better assessment of memory and executive functions);
- ▶ The total score is out of 100, but the 3MS also enables one to calculate the **MMSE score out of 30** for the purposes of submitting a drug reimbursement request (RAMQ).



## Floor and ceiling effects of the more comprehensive psychometric screening tools

The scores on the 3MS, MMSE and MoCA scales can be:

- ▶ **Normal** in the **early** stages or in the atypical forms of the disease; or
- ▶ **Abnormal** in patients with no NCDs but whose **previous level of functioning was low**.



## For health and social services professionals

If the **MMSE** score is **27 or 28**:

- ▶ An **MoCA score < 26\*** can be used to obtain authorization for drug coverage by the RAMQ.

**Note** : Systematically and simultaneously administering the MMSE and the MoCA in other circumstances does not provide a gain in diagnostic accuracy and is not recommended.

\* The MoCA score alone is not considered for granting authorization for drug coverage by the RAMQ.

## Assessment of cognition (Cont'd)

### ✓ Caregiver questionnaires

To obtain information in addition to that provided by the other psychometric screening tools, or if the patient is unable to answer the questions on the screening tools (lack of time or uncooperative), have the caregiver complete a questionnaire for identifying a cognitive and/or functional change, such as:

The **AD8 questionnaire**  
(Ascertain Dementia 8)

The short version of the **IQCODE**  
(Informant Questionnaire on Cognitive Decline in the Elderly)

**Note :** The results can guide the choice of appropriate psychometric screening tool to be used during the follow-up and enrich the qualitative data concerning the cognitive and functional decline.

## Assessment of the psychological and behavioural symptoms of dementia (BPSD)

### ✓ Rapid screening tools

For rapid screening, check with the patient or caregiver (to the extent possible) if, during the past few months, either has noticed a personality, behaviour or mood change.

If a **personality and behaviour change** has been observed\*:

- ▶ Use a screening tool such as the [short version of the Neuropsychiatric Inventory \(NPI-R\)](#).

If a **mood change** has been observed\*:

- ▶ A more thorough evaluation could be performed with a screening tool such as the [Patient Health Questionnaire-9 \(PHQ-9\)](#).

If **no change** has been observed:

- ▶ Do another BPSD assessment during the annual follow-up, or earlier if there is a specific need to do so.

\* If a **personality, behaviour or mood change** has been observed, an appropriate medical intervention should be provided.



### For health and social services professionals

For help in determining what the most appropriate tool is, consult the [quick-reference guide](#).