

# An Overview of the MIS (Memory Impairment Screen)

## Components, Administration, and Scoring

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The memory impairment screen (MIS) is a brief screening tool to assess [memory](#). It is often used as a preliminary test, along with [other screening tools](#), to evaluate the cognition of someone who seems to display some possible impairment in their ability to think and recall.

The MIS is one of three tools recommended for use in the Medicare Annual Wellness Visit by the Alzheimer's Association. The other two are the [GPCOG](#) and the [Mini-Cog](#).

## Components

If "Maude" is being given the MIS, she will be asked to perform the following tasks:

1. Four words in large print (24 font or larger) are shown to Maude and she is asked to read each item aloud. For example, the four words may be checkers, saucer, telegram, and Red Cross.

2. Maude is then given a category and asked to identify which word fits that category. For example, the category of "games" is provided and she must be able to identify that the word "checkers" fits that category. After completing this task for all four words on the paper, the paper is removed from sight and Maude is told that she will have to remember these words in a few minutes.
3. Next, Maude is asked to perform a task that distracts her from the four words she just learned, such as counting to 20 forwards and backwards or counting backwards by sevens starting at 100.
4. After completing this distracting task, Maude is asked to recall the four words. She is given at least 5 seconds to remember each of the words. This is called the free recall section of the test because she is being asked to remember the words but not given any clues to do so.
5. If more than 10 seconds have passed with no words recalled, Maude is then given the categorical clue for each word and asked to recall the word. For example, the test administrator will say that one of the items was a game and this might prompt Maude to remember the word "checkers." This is the cued recall section of the test.

## Scoring

For each word recalled without any clues (free recall), Maude will receive two points. For each word recalled with the categorical clue, Maude will receive one point.

A score of 5-8 indicates no cognitive impairment, while a score of 4 or below points to possible cognitive impairment.

## Effectiveness

The MIS has been shown to be more effective in identifying cognitive impairment and less costly than the standard Mini Mental State Exam. (The MIS is copyrighted by the Albert Einstein College of Medicine but clinical use is free.)

## Pros

- The MIS does not require the ability to write, so it's a good choice if motor function is impaired.
- It's brief, requiring about four minutes to administer.

- Performance on the MIS shows little effect from education level. (Someone who has gone to school through 6th grade should be able to perform just as well as someone with a college education.)
- The MIS remains accurate when used in multiple cultural settings and in different languages.
- It does not require extensive training to administer.
- There is also an MIS-T screening which is a version of the MIS that can be administered over the telephone. Research has shown that the MIS-T is effective in detecting cognitive impairment.

## Cons

- One caution with the MIS is that it can't be used with persons who are unable to read, whether due to a visual impairment or due to illiteracy.
- It does not evaluate [executive functioning](#), which can be an early symptom in some types of dementia including [vascular dementia](#) and [frontotemporal dementia](#).
- It does not evaluate [visuospatial ability](#), which also can be affected by dementia.

## A Word From Verywell

Remember that the MIS is a screening tool, not a definitive diagnostic tool. Poor performance on the MIS indicates that there may be a reason to be concerned, but a full physician assessment is necessary to evaluate cognition and eventually [diagnose dementia](#). Keep in mind that there are some causes of memory impairment that can be at least partially reversible with diagnosis and appropriate treatment, such as [vitamin B12 deficiency](#), medication interactions, [delirium](#), and [normal pressure hydrocephalus](#).

### Article Sources

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