

Assessment Details

ID: 574983

Birthdate: 1945/12/31 Group: Females 75-84

Date: 2023/05/11

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Assessment Summary

What is the Creyos Dementia Screener?

The Creyos Dementia Screener is a brief assessment that can help determine whether or not an individual should complete additional testing related to mild cognitive impairment (MCI).¹

Screener Result

🚩 **Further testing is suggested**

Next Steps

Further testing is suggested because the patient's performance is similar to that of a potentially impaired population. Additional testing could include the cognitive and mental health examinations, clinical interviews, evaluations of the patient's family history, and laboratory tests.²

The Alzheimer's Association also recommends testing using a structured cognitive assessment as part of routine checkups, such as the Annual Wellness Visit.³

How Is Performance Determined?

The Creyos Dementia Screener contains two cognitive tasks: Visuospatial Working Memory (Number Ladder) and Response Inhibition (Double Trouble). Within these tasks are 22 measures of performance: behavioral markers like average reaction time, reaction time variability, the type and number of errors, etc. A machine learning algorithm was trained to distinguish the marker data from a healthy population sample from those of patients with potential cognitive impairments. The algorithm analyzes the patient's performance and estimates if it is likely that their data could have come from the impaired patient group, and if so, further testing is suggested.

References

1. Sternin, A., Burns, A., Owen, A.M. (2019). Thirty-Five Years of Computerized Cognitive Assessment of Aging—Where Are We Now? *Diagnostics*, 9, 114. <https://doi.org/10.3390/diagnostics9030114>
2. Alzheimer's Association (n.d.) *Mild cognitive impairment (MCI)*. https://www.alz.org/alzheimers-dementia/what-is-dementia/related_conditions/mild-cognitive-impairment
3. Cordell, C.B., Borson, S., Boustani, M., Chodosh, J., Reuben, D., Verghese, J., Thies, W., & Fried, L.B. (2013). Alzheimer's Association recommendations for operationalizing the detection of cognitive impairment during the Medicare Annual Wellness Visit in a primary care setting. *Alzheimer's & Dementia*, 9, 141-150. <https://doi.org/10.1016/j.jalz.2012.09.011>