

The MemTrax continuous recognition test for advanced cognitive impairment screening

July 13 2023



Credit: Pixabay/CC0 Public Domain

A new editorial paper was published in *Aging*, titled "Advancing screening for cognitive impairment: the memtrax continuous recognition



test."

Extensive efforts to find a treatment for Alzheimer's disease (AD) span over 40 years, with the often-repeated request for better means to assess the principal dysfunction of this disease, <u>memory impairment</u>. Tremendous costs and resources have already been consumed in the development of treatments for this prevalent and well-recognized condition, e.g., over \$40 billion. These pervasive failures support the urgent need for instruments far superior to those used even in recent studies.

The critical impairment in AD is a disorder of neuroplasticity. Thus, cognitive tests which can rapidly, sensitively, frequently, inexpensively, and precisely measure the aspects of memory specifically attacked by AD are principally needed. In this new editorial, researchers J. Wesson Ashford, James O. Clifford and Michael F. Bergeron from Stanford University discuss a continuous recognition test of memory called MemTrax that has been developed to quickly and accurately quantify memory processing, storage and rate of retrieval.

"The precision of MemTrax would best improve the specification of the severity of <u>cognitive impairment</u> in early phases of Alzheimer's disease, a period of this disease when paper and pencil and historical recollection only provide poor estimates of function," say the researchers.

Further, MemTrax can precisely assess the rate of change over time with repeat testing. By assessing performance metrics and rate of recognition response, MemTrax can screen for many varieties of cognitive impairment and thus would be an ideal tool for use in the elderly U.S. population for the Medicare Annual Wellness Visit. With a test such as MemTrax or other effective online testing, populations can be broadly and inexpensively assessed for AD-related cognitive impairment and then brought into clinical studies to determine what environmental,



genetic, or interventional remedies can prevent further development of AD and the pace and/or extent of cognitive decline.

"MemTrax is especially well suited for assessment of very early AD, including early mild cognitive impairment, a time when the focus should be on prevention of AD pathology, not removal of AD pathology," say the researchers.

More information: J. Wesson Ashford et al, Advancing screening for cognitive impairment: the memtrax continuous recognition test, *Aging* (2023). DOI: 10.18632/aging.204828

Provided by Impact Journals LLC

Citation: The MemTrax continuous recognition test for advanced cognitive impairment screening (2023, July 13) retrieved 9 May 2024 from <u>https://medicalxpress.com/news/2023-07-memtrax-recognition-advanced-cognitive-impairment.html</u>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.