

Hannover Re and Neurotrack have joined forces to bring an innovative cognitive assessment and engagement tool to the life market

Optimizing the Underwriting Process with a Digital Cognitive Assessment



Neurotrack has developed the first cognitive health program to help individuals manage their brain health and reduce their risk of cognitive decline in the future. Neurotrack's approach is focused on preserving and strengthening cognitive health now as opposed to managing its decline later. In a world that has become almost entirely digital, insurance underwriting still heavily relies on paper and pencil processes that take the average applicant 12 weeks to apply. Insurance companies that are dynamic enough to improve their customer experience by digitizing assessments that streamline the underwriting process will ultimately win. The COVID-19 pandemic has highlighted the challenges that currently exist in the time and labor-intensive underwriting process; however, companies that invest in making changes now will reap the benefits long after the pandemic ends.

Hannover Re has officially collaborated with Neurotrack, a Silicon Valley telehealth company that has spent the last 8 years solving one of the more pressing hurdles in insurance underwriting: how to remotely and accurately administer a



cognitive assessment. Neurotrack has developed a groundbreaking, digitally-enabled, and clinically-validated cognitive assessment tool that allows individuals to reliably assess their cognitive condition. Individuals take these assessments from the privacy of their own homes using an ordinary smart device or computer. The data is then analyzed through a proprietary algorithm that generates quantifiable scores of "Expected", "Approaching Expected" or "Below Expected". This baseline score is comparable to any standard pen and paper cognitive assessment currently used to underwrite life insurance policies.



Source: Neurotrack Technologies, Inc.

Reliable, Accurate & Fast

Neurotrack always starts with science. Dr. Stuart Zola, one of the country's leading neuroscientists and Co-Director of the Emory University Alzheimer's Disease Research Center, co-founded the company after mapping the memory system of the brain and quantifying the relationship between eye movement and cognition. This set the standard for sciencebacked evidence that has been the foundation of Neurotrack's innovations in the digital delivery of assessment and care.

Digital eye-tracking has been proven to be an accurate and reliable method of cognitive assessment and has been used for a multitude of test protocols. In a 2012 study conducted by Neurotrack's clinical researchers and published in the American Journal of Alzheimer's and Other Dementias¹, 89% of people who scored in the "Below Expected" range of memory retention progressed to Alzheimer's or Mild Cognitive Impairment within three years, and 100% progressed to a disease state within six years of the initial test. Conversely, 0% of people who scored in an "Expected" range of memory retention developed Alzheimer's or MCI in the same timeframe.



Source: Neurotrack Technologies, Inc.

Video Verification

In addition to gathering eye-tracking data to compute a person's cognitive assessment score, Neurotrack also utilizes video capture to provide valuable quality assurance.

A detailed analysis of over 1,400 videos collected at Neurotrack revealed that 7.4% of unsupervised assessments had environmental distractions present, leading to unreliable results.

Neurotrack's built-in QA controls are able to flag these distractions and make a determination on the efficacy of assessment results, which is currently otherwise impossible without 1:1 in-person supervision.

Designed for Usability and an Enhanced Customer Experience

With traditional cognitive tests, a person is required to sit for several hours responding to prompts recorded by a doctor or nurse. The technology behind digital testing is able to



capture more information, such as executive function and response rate, and process it much faster.

A series of tests can be completed in minutes, with the results delivered shortly after.

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Neurotrack constantly strives to improve the user experience. There have been over 50,000 tests taken on the Neurotrack platform. Neurotrack believes feedback is critical to our success and engages users to provide the latest feedback.

Early Detection, Early Intervention

Neurotrack's assessments grant individuals the ability to establish a baseline for their cognitive health and track themselves over time. This allows for early detection of changes and whether intervention should be considered. Neurotrack's Cognitive Health Program (CHP) is a behavioral-based intervention that includes targeted lifestyle recommendations in the areas of nutrition, exercise, stress management, sleep, cognitive training, and social engagement. Neurotrack conducted a 12-month study examining cognition, depression, and anxiety which concluded that older adults at risk of developing Alzheimer's disease experienced statistically significant improvements in their cognitive function and mental health² when adhering to the CHP.

With Neurotrack's assessments and intervention program, life insurers can demonstrate a commitment to improving the long-term health and quality of life for their policyholders. Offering Neurotrack as a unique benefit allows insurers to better engage with their customers and build lifelong loyalty. Furthermore, the potential to delay the onset of dementia, along with the associated costs of care, can lead to substantial reductions in liability for insurers.

Simple Implementation

Implementing Neurotrack's cognitive assessment solution is easy. Once an individual completes the assessments, results are returned to the carrier via a report or direct integration with your backend systems, creating a seamless process that expedites underwriting timing.

 Zola SM, Manzanares CM, Clopton P, Lah JJ, Levey AI. A behavioral task predicts conversion to mild cognitive impairment and Alzheimer's disease. Am J Alzheimers Dis Other Demen. 2013;28(2):179-184. doi:10.1177/1533317512470484 https://pubmed.ncbi.nlm.nih.gov/23271330/

Looking Ahead

Leveraging a tool like Neurotrack will ensure that new policies continue to be processed during the COVID-19 pandemic. In addition, using Neurotrack will continue to benefit life insurance carriers well into the future by expediting the underwriting process, decreasing costs associated with traditional cognitive assessments, and improving overall customer satisfaction. To learn more, visit www.neurotrack.com.

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