

Philips launches AI based clinical product for aiding cognitive assessment

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Philips IntelliSpace Cognition provides U.S. healthcare professionals with a powerful aid for assessing cognitive impairments due to neurological conditions



Royal Philips, a global leader in health technology has announced the U.S. debut of its new cognitive assessment platform IntelliSpace Cognition. Leveraging the power of artificial intelligence (AI) and Philips' cloud-based HealthSuite Digital Platform, IntelliSpace Cognition provides healthcare professionals with a powerful aid for assessing cognitive impairment.

IntelliSpace Cognition automates and enhances well-established neuropsychological tests, offering new insights for clinicians treating patients with debilitating neurological conditions. It provides direct access to detailed information about a patient's cognition while also providing quantitative longitudinal data to aid in assessing disease progression and treatment efficacy.

"While dealing with the rising tide of neurological disease remains a great challenge, our solution will facilitate robust and reliable cognitive assessment with greater efficiency and scale than traditional methods," said Jeroen Tas, Chief Innovation & Strategy Officer at Philips. "Combining this with imaging-based diagnostics we aim to offer care providers more meaningful insights into the health of their patients and potentially open up new possibilities for treatment in the future."

The number of neuropsychologists able to perform an assessment is limited and coupled with a rise in the number of patients suffering from neurological conditions, there is a need for new innovative solutions. A rapid and reliable method for neurologists to better assess cognition and select those that would benefit from seeing a neuropsychologist would alleviate pressure on this part of the healthcare system. Results from a study conducted by Philips support interest in new solutions to address these issues. Ninety-two percent of neurologists indicated that the IntelliSpace Cognition concept would be appealing to use within their practice.

Philips has invested in collecting insights from both neurologists and neuropsychologists in order to design IntelliSpace Cognition in an iterative manner and ensure it fits into the majority of existing workflows. IntelliSpace Cognition was developed under a quality management system for medical devices and has undergone rigorous usability testing and a monitored clinical trial has been performed to validate the digital cognitive tests and collect normative data from healthy individuals that reflect the U.S. population. The Philips study found that 80% of neurologists said they would feel confident using IntelliSpace

Cognition because Philips has collected normative data to provide peer comparisons to a healthy group.

In the typical workflow, illustrated in this video, a patient performs various tests on a tablet under minimal supervision of an assistant with audio prompts to guide in tasks such as drawing a clock, joining numbered dots or remembering a sequence of numbers. The results of the tests are then communicated to IntelliSpace Cognition's cloud-based computing platform, where advanced validated algorithms perform analytics to present the clinician with the results. IntelliSpace Cognition is just one part of an expanding neurology IT portfolio of Philips which includes, neuroimaging, high density EEG and now digital cognitive assessment.

IntelliSpace Cognition will initially be commercially available only in the U.S.