Making cognitive decline visible before it becomes a crisis

TOPICS: AI-Enabled Care Navigation | Early Detection & Screening | Clinical Decision Support | Care Gap Identification | Health Equity

About the organizations

Claremedica is a value-based, full-risk primary care organization serving a culturally and linguistically diverse senior population across more than 35 sites in Florida. Its high-touch model sees patients 7 to 10 times a year, usually by the same care team over several years, and is built around catching problems early rather than responding to them late.

Creyos is a digital cognitive assessment platform built on 30+ years of peer-reviewed research. Its validated cognitive tasks and behavioral health questionnaires are used in primary care, neurology, and psychiatry to support earlier detection and clinical decision-making.

The opportunity

Claremedica had screened organization-wide for more than 2 years using the MMSE. It was administered consistently, but a single pass/fail score told clinicians nothing about which cognitive domains were affected, could not be compared reliably across visits, and gave them no basis for a next step. Meanwhile, internal root cause analysis of hospital admissions kept pointing back to cognition.

The challenge

The MMSE was replaced with a 2-task cognitive screener developed using machine learning. A support vector classifier, trained on ~4,700 cases already labeled as impaired or unimpaired, searched all 12 Creyos tasks to find the 2 that best distinguished between them.[1] That trained model now scores each patient at the point of care, in 6 minutes on an iPad: short enough for every visit, and sensitive to the early-stage patterns the MMSE cut-off score had been clearing.

The approach

Evaluation ran against other digital platforms rather than paper tools, against 4 non-negotiables: clinical validity, scalability across all sites, compatibility with a multilingual population, and integration with existing analytics infrastructure. Claremedica then rolled out to all sites at once, feeding screening data into real-time dashboards, and built the clinical pathways first, so every positive result had a defined next action: medication review, chronic disease management, mood screening, social engagement.

The impact

- ✔ **95%+ clinical adoption on day one**, the highest of 10 go-lives in Claremedica's disease detection program, with screening time down from roughly 12 minutes to 6.
- ✔ **34,000+ screenings in 7 months**, with dementia detected at more than twice the rate of the MMSE in a population where 80%+ of patients had already been screened.
- ✔ **90%+ of newly identified patients caught at early or mild stage**, the window where proactive care planning and family preparation are still possible.

> "It has changed the way our primary care providers think about what is possible when it comes to managing cognitive decline."
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> **— Dr. Nehal Gheewala, MD**
> *Chief Medical Officer, Claremedica*

[1] Urian et al. Early cognitive screening for individuals on the dementia continuum: a novel approach amid current trends. *J Alzheimers Dis*. 2026;1-13. doi:10.1177/13872877261424289