

# Real-Time Clinical Report Generation for Brain Health Clinics

NeuroSync had built one of the most advanced brain health diagnostic platforms in the industry, but clinicians were spending hours per patient assembling reports instead of treating people. To automate that work, NeuroSync turned to Vantiqu, a real-time AI orchestration platform built for mission-critical operations.

## From Hours of Report Writing to Minutes

Using the Vantiqu platform, NeuroSync deployed AI agents that pull data from intake notes, physician interviews, third-party evaluations, PDF exam results, and EYE-SYNC assessments, then synthesize it into structured clinical narratives. Clinicians review and approve instead of writing reports from scratch.



**Key Results**

**Hours to minutes** Per patient report

**Cost-effective** AI processing at any volume

**500,000+** Patient assessments to date

## Why NeuroSync Chose Vantiqu

### Built for real-time orchestration

Vantiqu was the only platform capable of reliably synthesizing fragmented clinical data from multiple sources and systems in real time.

### Custom-built for clinical complexity

Vantiqu built custom OCR and extraction pipelines for clinical data that off-the-shelf tools could not handle, isolating diagnosis language and dramatically reducing token usage.

### Enterprise-grade from day one

Deployed on Vantiqu Edge with encryption, HIPAA-readiness, and a clear path to scale.

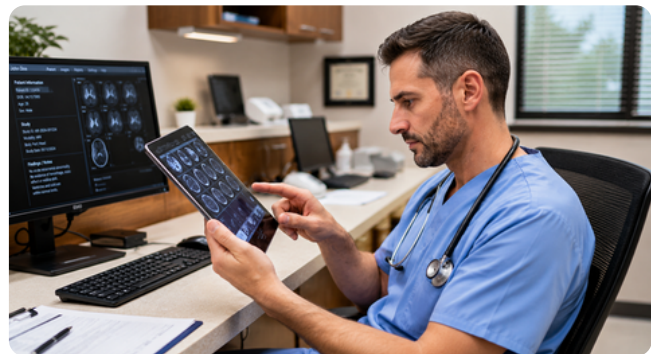
"Vantiqu came in and made the solution happen for us. Their agility with LLMs and natural language configurations is changing the game."

—Gary Gregory, CEO, NeuroSync



## About NeuroSync

NeuroSync develops software and analytics tools for diagnosing neurological conditions like traumatic brain injuries. Built on 15 years of research with the U.S. Department of Defense and the Brain Trauma Foundation, its FDA-cleared EYE-SYNC platform has powered over 500,000 patient assessments.



## The Challenge

NeuroSync had built one of the most advanced brain health diagnostic platforms in the industry, but the workflow around its assessments was still entirely manual. Every report required clinicians to pull data from multiple disconnected sources and rewrite it into precise medical language, taking hours per patient. NeuroSync needed a platform that could synthesize fragmented clinical data from multiple sources and systems in real time, without rebuilding its existing infrastructure.

## Key Solution Capabilities

### Agentic Report Generation

AI agents turn patient data into structured clinical narratives in precise medical language. Because the AI reorganizes existing data rather than generating it, hallucination risk is minimal.



### Custom OCR and Data Extraction Pipelines

NeuroSync's historical data lived in PDFs, images, and unstructured text. Vantiq built custom pipelines that isolate diagnosis language and cut token usage dramatically.



### Human-in-the-Loop Workflow

Vantiq's human-in-the-loop capabilities create a real-time review workflow, automatically advancing reports as each clinician completes their step.



### Deployed on Vantiq Edge

The solution runs on Vantiq Edge with encryption, scalability, and HIPAA-readiness out of the box, with the ability to swap in new LLM models as they improve.



## Built for What Comes Next

With the report generation infrastructure in place, NeuroSync is developing algorithms that assess patients across multiple neurological conditions simultaneously. The platform is rolling out to partner clinics nationwide.

See how real-time orchestration and AI-driven automation can transform your operations.

Schedule a live demonstration and discover what's possible.

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