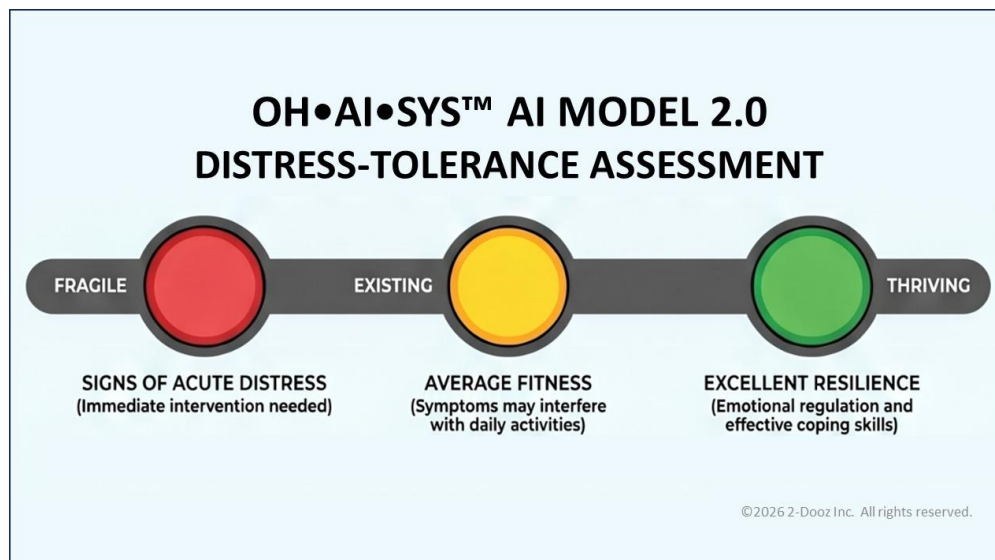




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2-Dooz Announces OH•AI•SYS AI PTSD Pilot Study Results

OH•AI•SYS™ demonstrates superior screening precision against VA PTSD Self-Screen, highlighting the “triage burden” of rapid filters.



SILICON VALLEY, CA — July 10, 2026 — 2-Dooz, a pioneer in behavioral health technology, today released the findings of a controlled validation pilot study evaluating the advanced [OH•AI•SYS](#) AI platform against the Veteran Affairs (VA) PTSD Self-Screening Tool. Key Observation: OH•AI•SYS AI achieved a perfect score in the study, relative to the clinician-standard Post-Traumatic Stress Disorder Checklist for DSM-5 ([PCL-5](#)), which served as the anchoring reference standard.

The proof-of-concept study highlights a critical operational challenge in behavioral health screening: the need to balance the speed of ultra-short surveys against the systemic costs of clinical bottlenecks and diagnostic fatigue. The study demonstrated that while rapid screening

methods offer speed, they can introduce a measurable "triage burden" via false positive classifications, which can tax downstream healthcare resources.

A primary objective of the pilot study was to assess the feasibility of utilizing a “behavioral digital twins” methodology to compare the OH•AI•SYS screening capability to the VA Self-Screening Tool, utilizing the PCL-5 screen as a common reference. The study affirms the use of large language model (LLM) generated behavioral digital twin participants in virtual clinical studies for this purpose. A fully powered follow-on study is planned.

The Speed vs. Precision Screening Dilemma

In behavioral health, screening workflows inherently wrestle with a fundamental trade-off: abbreviated tools reduce immediate friction but risk over-flagging healthy individuals or missing nuanced clinical presentations.

The OH•AI•SYS vs. [VA PTSD Self-Screen](#) Pilot Study (“pilot study”) compared two distinct screening philosophies using the [PCL-5](#) ≥ 33 clinical threshold as the definitive classification of the *need for additional assessment*:

- **OH•AI•SYS Platform:** A comprehensive system comprising a baseline 55-question survey for estimating distress-tolerance (takes 10 minutes to complete). The system outputs a tiered behavioral profile: *Green (Thriving)*, *Yellow (Existing)*, which may include a recommendation for professional assessment, and *Red (Fragile)*, which strongly recommends professional intervention.
- **VA PTSD Self-Screening Tool:** A rapid (takes less than 5 minutes to complete), 5-item self-report adaptation of the Primary Care PTSD Screen for DSM-5 (PC-PTSD-5), designed as a high-sensitivity triage filter that intentionally accepts over-flagging to ensure true cases are not missed.

High-Fidelity Behavioral Digital Twins Methodology

To evaluate the cross-tool performance under rigorous, controlled conditions, researchers deployed a bleeding-edge **Behavioral Digital Twin** validation protocol. Twelve highly articulated synthetic personas were generated across a broad spectrum of randomly generated post-trauma severity indices:

PCL-5 Cohort Scores: {7, 45, 67, 56, 46, 23, 11, 79, 42, 71, 54, 66}.

To ensure architectural neutrality and mitigate foundational LLM biases, the digital twins were built using a hybrid split: seven of the digital twins were generated by GPT-5.4 nano, comprising PCL-5 total scores 7, 67, 56, 11, 79, 42, and 54; and five of the digital twins were generated by Gemini 3.5 Flash, comprising PCL-5 total scores 45, 46, 23, 71, and 66.

Each behavioral digital twin fully completed the PCL-5, OH•AI•SYS, and VA PTSD Self-Screen surveys. Pairwise diagnostic classifications were mapped into a 2 X 2 contingency matrix for exact non-parametric analysis.

OH•AI•SYS vs. VA PTSD Self-Screen Pilot Study Results

The pilot study yielded stark differentiation in categorical precision:

- **OH•AI•SYS achieved 100% diagnostic alignment**, matching the PCL-5 reference standard destination in 12 out of 12 cases.
- **VA PTSD Self-Screen** achieved 11 out of 12 correct classifications, yielding **one distinct false positive** by incorrectly flagging a digital twin with a sub-threshold PCL-5 score of 23 as requiring clinical intervention.

The 2 X 2 Discordance Matrix (N=12) for the study is as follows.

	C2 (VA) Correct	C2 (VA) Incorrect
C1 (OHAI SYS) Correct	11 (<i>a</i>)	1 (<i>b</i>)
C1 (OHAI SYS) Incorrect	0 (<i>c</i>)	0 (<i>d</i>)

Due to the constrained sample size typical of proof-of-concept pilots, a formal McNemar's Chi-square with Edwards' Continuity Correction and a Binomial Exact Test both yielded a p-value = 1.0, confirming need for a fully powered follow-on study.

Mitigating the Triage Burden

"While a single false positive may seem nominal in an isolated 12-subject pilot, scaling that error rate across thousands of individuals exposes a massive systemic bottleneck," noted the research team.

In broad deployments, an uncalibrated triage filter creates a severe "Triage Burden" consisting of the following:

- **Clinical Bottlenecks:** Flooding restricted mental health pipelines with false-alarm referrals, driving up wait times for individuals in critical need.
- **Diagnostic Fatigue:** Generating unnecessary patient anxiety, stigma, and frustration from redundant, long-form clinical interviews.
- **Macro-Economic Waste:** Demonstrating that while a longer survey takes more time initially, it generates exponential system-wide cost savings by eliminating redundant clinical validation pathways.

Follow-On Study

Having established absolute proof-of-concept, 2-Dooz, Inc. is preparing to launch a fully powered follow-on study scaling the framework to **120–150 behavioral digital twins**. The goal is to affirm the pilot study findings.

The expanded sample size is explicitly calculated to generate the statistical power required to reject the null hypothesis of marginal homogeneity. If the current trend holds, the larger cohort will yield 10 to 12 discordant pairs—providing a mathematically robust foundation for McNemar's test ($\alpha = 0.05$, Power = 80%) or exact binomial variants to formally validate OH•AI•SYS's superior specificity profile relative to the VA PTSD Self-Screen.

About 2-Dooz

2-Dooz is a privately funded, pioneering, and socially conscious Silicon Valley-based incubator, accelerator, independent biotechnology research laboratory, and consultancy. Founded by Tony Clark in 2003 and formally incorporated in May 2006, the company's mission is to foster affirming, technology-based products and services that enhance purpose and quality of living. 2-Dooz leverages cutting-edge AI innovation to develop solutions that empower individuals to proactively manage their health and well-being.

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