

O2OS™

Population-Scale Behavioral Measurement & Routing Infrastructure

NSR-2026-001

Net Structural Exposure

Medical-Only Model

Per 1,000,000 Covered Lives

Actuarial Exposure This model quantifies the economic exposure created when behavioral risk goes unmeasured or misclassified at population scale.

System Infrastructure Standardized behavioral measurement infrastructure is required to close the detection, routing, and intervention gaps.

Operational Application Health systems, payers, and consulting firms can use this framework to model population-level behavioral risk and intervention impact.

DRIVERS OF STRUCTURAL EXPOSURE

75%+ Penetration Gap

1,000,000 × 75% =
750,000 covered lives
never reached by validated
behavioral screening.

≈25% Sensitivity Loss

250,000 remaining × 25%
= 62,500 misclassified by
single-test screening.
False negatives create
invisible clinical and
financial liability.

≈67% Routing Loss

187,500 correctly identified
× ~67% = 125,000 never
convert to care.
Identification without
connection does not
translate into clinical
intervention.

93% of Behavioral Health Risk Outside Structured Infrastructure

937,500 of 1,000,000 Covered Lives Outside Validated Screening, Measurement & Routing

WHAT EACH GAP MEANS

Penetration Gap	Sensitivity Loss	Routing Breakdown
The population never reached by validated behavioral screening. Unmeasured risk cannot be managed, priced, or routed.	Single-test screening misclassifies ≈25% of measured individuals. False negatives create invisible clinical and financial liability.	70–80% of positive screens never convert to care. Identification without connection does not translate into clinical

NET STRUCTURAL EXPOSURE

Medical-Only - Base Case

\$593M

Per 1,000,000 Covered Lives

Sensitivity (λ): \$494M–\$692M

Assumptions (Midpoint Parameters): C=\$6,200 | $\pi_p=17.5\%$ | $\lambda=30\%$

O2OS™ provides unified measurement and routing infrastructure to close all three gaps.

The Oxygen Plan

Working in collaboration with Mayo Clinic

Exposure model derived from CMS utilization data, peer-reviewed sensitivity benchmarks, and published referral conversion studies.

This document has not undergone external academic peer review and is published for institutional discussion and methodological transparency.