NUROS | Clinical Methodology Overview

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Subject: Vocal Biomarker Analysis Framework & Diagnostic Pipeline

1. Objective

Nuros provides an auxiliary, high-precision risk-scoring engine designed to assist in the early detection of neuro-motor, endocrine, and physiological health trends. By utilizing advanced signal processing, we aim to reduce the diagnostic latency experienced by patients in complex health systems.

2. The Agentic Diagnostic Pipeline

Our platform operates on a three-stage clinical architecture designed for precision and reliability:

Stage 1: High-Fidelity Capture

The platform requires a 20-second vocal biomarker capture to ensure sufficient data points for structural analysis.

Stage 2: Linguistic Normalization

Our proprietary Language Shield architecture filters out prosodic variance (accent, dialect, speech rhythm). This allows the engine to isolate the fundamental physics of the vocal folds (F■ and glottal pulse) from communicative style, ensuring equitable analysis for diverse populations.

Stage 3: Multi-Parameter Risk-Scoring

The captured data is processed for micro-instabilities, specifically Jitter (frequency variation) and Shimmer (amplitude variation). These markers are mapped against validated clinical baselines to identify indicators of vocal fold edema, endocrine-related stiffness, or neuro-motor decay.

3. The "Vocal Health Twin" (Longitudinal Tracking)

Nuros departs from 'snapshot' diagnostics. We implement a longitudinal model where each scan is compared against the user's established Vocal Health Twin—a personal digital baseline. This allows for the detection of the rate of change in health markers, which is often more clinically significant than single-point absolute values.

4. Clinical Integration & Safety

Nuros is categorized as an auxiliary screening tool rather than a medical diagnostic device.

Administrative Efficiency

We offer an automated Clinical Scribe Agent that translates complex raw data into a structured clinical narrative, designed to assist healthcare professionals in documentation and assessment.

Human-in-the-Loop

All high-risk signals generated by the Nuros platform are flagged for follow-up review. We mandate that any clinical concern identified by the software must be validated by a licensed practitioner before formal diagnostic action.

Data Privacy

Our platform utilizes AES-256-R5 encryption for all generated reports, ensuring PHIPA/PIPEDA-aligned security standards for patient health data.

For clinical inquiries or partnership information, please visit our platform portal.