

"Closing Africa's mental health treatment gap — not in decades, but now — through Voice AI and constrained Generative AI that works offline, in any language, for any frontline provider."

150M

PEOPLE UNTREATED
ACROSS AFRICA

<10%

DETECTED AT
FIRST CONTACT

1.4

MH PROFESSIONALS
PER 100K (WHO: 17)

62.2%

PTSD IN POST-
CONFLICT YOUTH

\$147B

ANNUAL LOST
PRODUCTIVITY

THE PROBLEM

A first-contact detection failure — not a demand problem

Across Africa, 150 million people live with mental health conditions — yet fewer than 10% are detected at first contact with care. The continent has just 1.4 mental health professionals per 100,000 population, against a WHO minimum of 17. Primary care detection approaches zero without structured tools, despite WHO mhGAP protocols that cannot be implemented where entry-level detection infrastructure is absent. The gap is structural and immediate.

Existing approaches fail for three reasons: self-report tools break down where distress presents somatically; digital platforms require literacy and connectivity; and community models are bottlenecked by scarce personnel. A different detection mechanism is required.

THE SOLUTION

ClarityConnect™ + Clarity AI™

ClarityConnect™ is AYA's end-to-end digital mental health platform — offline-first, multilingual, deployable on existing mobile hardware. **Clarity AI™** sits on top: it analyzes a 30-second speech sample, generates the Emotional Distress Index (EDI) — a calibrated four-level psychiatric severity signal — and translates that into plain-language triage guidance anchored to WHO mhGAP protocols. All outputs require provider confirmation before any clinical action.

— Detects distress in natural speech — no literacy required

— Operates fully offline on \$100–300 Android devices

— Supports Amharic, Afan Oromo, Tigrinya + more

— Non-diagnostic — human-in-the-loop by design

— Population-level severity dashboards for governments

PILOT RESULTS · LENEGEWA WOMEN'S REHABILITATION CENTER, ETHIOPIA

Deployed. Validated. Working.

85–95%

concordance with PHQ-9 / GAD-7 across clinical assessments

— Single-session triage — reduced from multiple visits to one encounter

— Non-specialist use — frontline nurses with no mental health training interpreted AI reports and initiated appropriate triage

— Beyond self-report — voice signals surfaced distress patients had not verbally disclosed

— Real-time visibility — converts mental health from invisible burden to measurable operational indicator

TRACTION

\$1.6M

Capital raised
NSF · Google · BCBS

14K

Pediatric voice
samples (U.S.)

3K+

Amharic samples
Ethiopia · ongoing

4

Peer-reviewed
publications

3

Govt ministry
MoUs signed

2

Google innovation
programs

SCALE POTENTIAL

If AYA raises detection from below 10% to 60%, the system identifies ~13,000 people per 100K in general populations and ~36,000–37,500 per 100K in conflict-affected settings — each with a structured recommendation for primary care action.

BUSINESS MODEL

Institutional SaaS (health systems, NGOs) · Government analytics contracts · Humanitarian sector agreements · De-identified population analytics. Concessional pricing for low-income government systems. Grant capital accelerates access in hardest-to-serve markets.

PARTNERS & INSTITUTIONS

MoH Ethiopia

MoIT Ethiopia

OSTA

Jimma University

Harvard

Georgia Tech

Santa Clara Univ.

ECCMY-DASSC

Google for Startups

NSF SBIR

"AYA-Innovation is building the infrastructure to close Africa's mental health treatment gap at the speed and scale Africa deserves."