

BACKGROUND

Brazil enacted **Law 14,878/2024** — a landmark National Dementia Policy mandating:

- Universal early diagnosis & care access
- Mandatory professional training in dementia signs
- Formal caregiver support & psychosocial programs
- Unified Health System integration of dementia services

Yet legal mandates clash with a **reality of systemic collapse**: fewer than **0.2%** of estimated cases reach clinical records — the **"Invisibility Gap."**

METHODS

- Nationwide geospatial & workforce analysis
- IBGE Census 2022 · DATASUS/SIH 2023 · CFM/CNES 2024
- ELSI-Brasil/Lancet 2023 × MS Relatório Nacional 2024
- "Invisibility Gap" = estimated prevalence vs. recorded interactions
- Specialist density mapped across all 26 states + 5 macro-regions
- Economic impact analysis: diagnostic delay cost framework

KEY REFERENCES

- IBGE Censo 2022 · DATASUS/SIH 2023
- CFM/Câmara 2024 — Geriatrician density data
- MS/Unifesp Relatório Nacional Demência 2024
- ELSI-Brasil, Lancet Regional Health (2023)
- Law 14,878/2024 — Brazil National Dementia Policy
- WHO Global Action Plan on Dementia 2017–2025
- Jaeger et al., Dement Neuropsychol 2021
- Owen (AAIC 2025) · Cornacchia (WCS 2025) · Ismail (AAIC 2025)

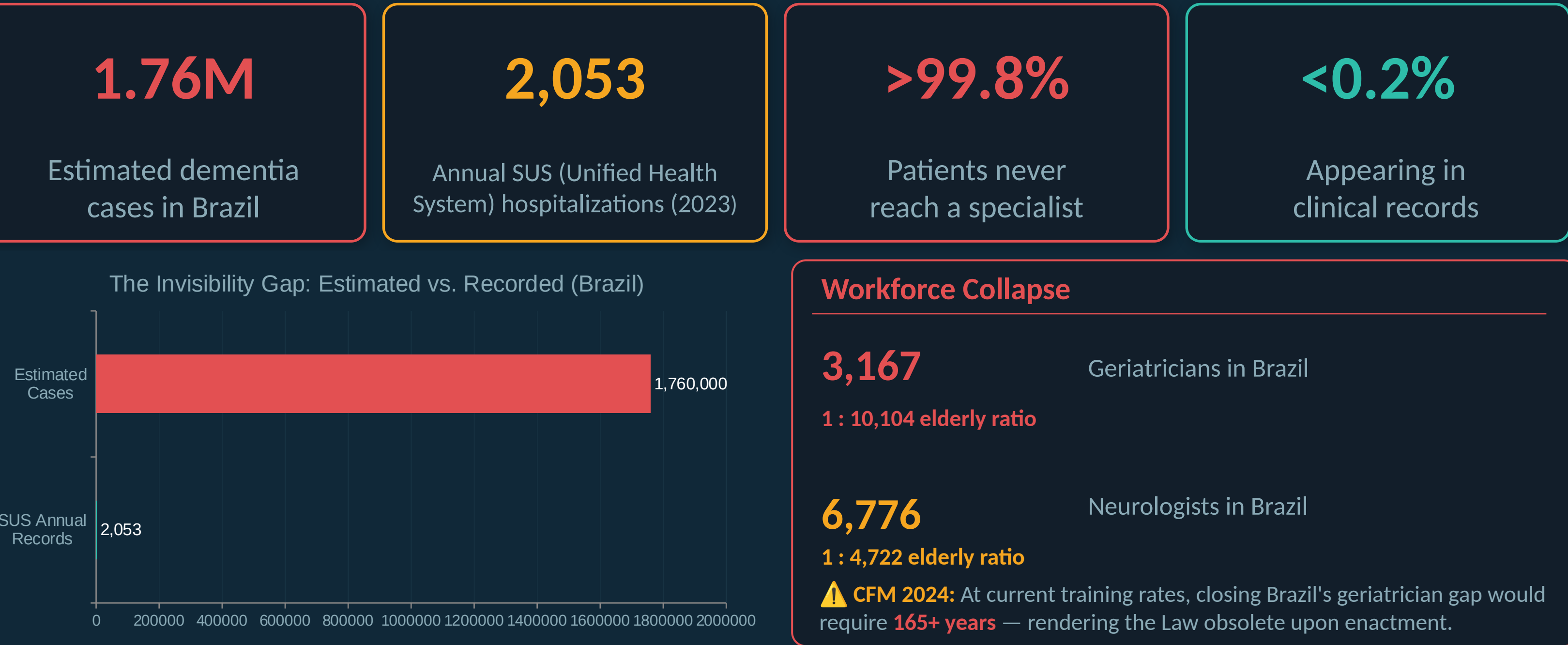
CONTACT



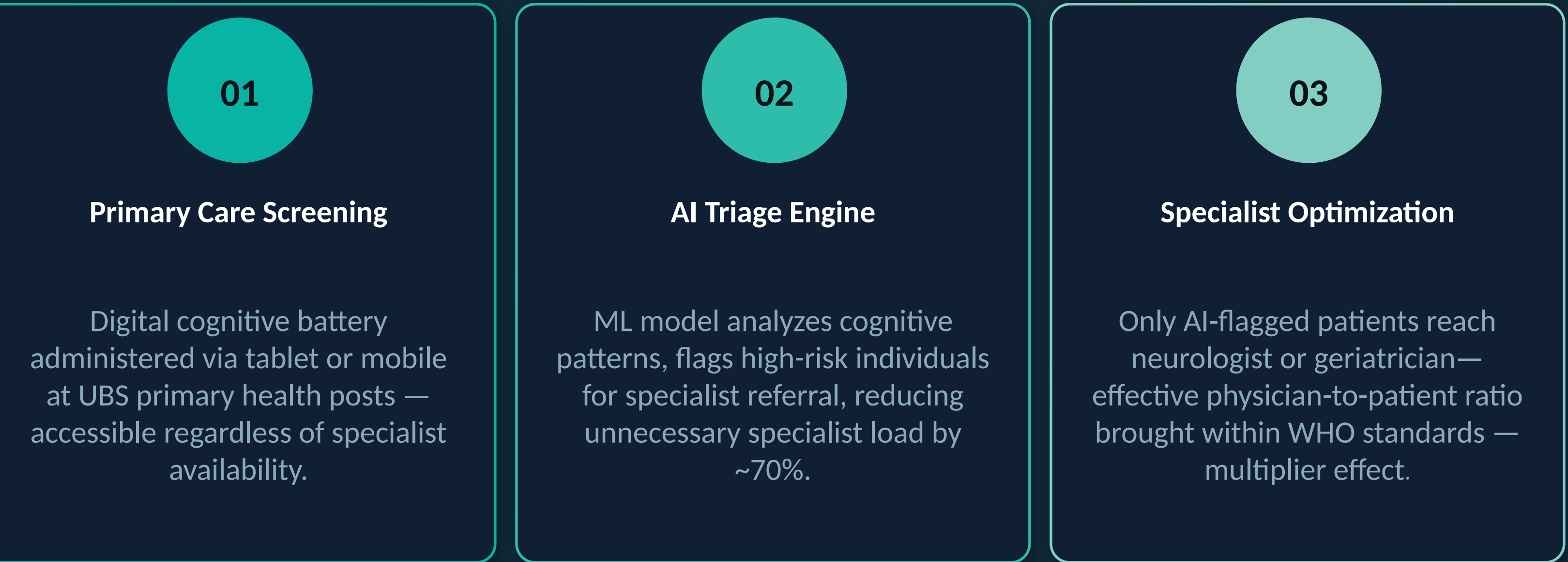
Scan to connect via WhatsApp Business
wa.me/5515981649096
Raissa Vidotti Cavagnini
CEO & Founder, Kairos NeuroTech

RESULTS

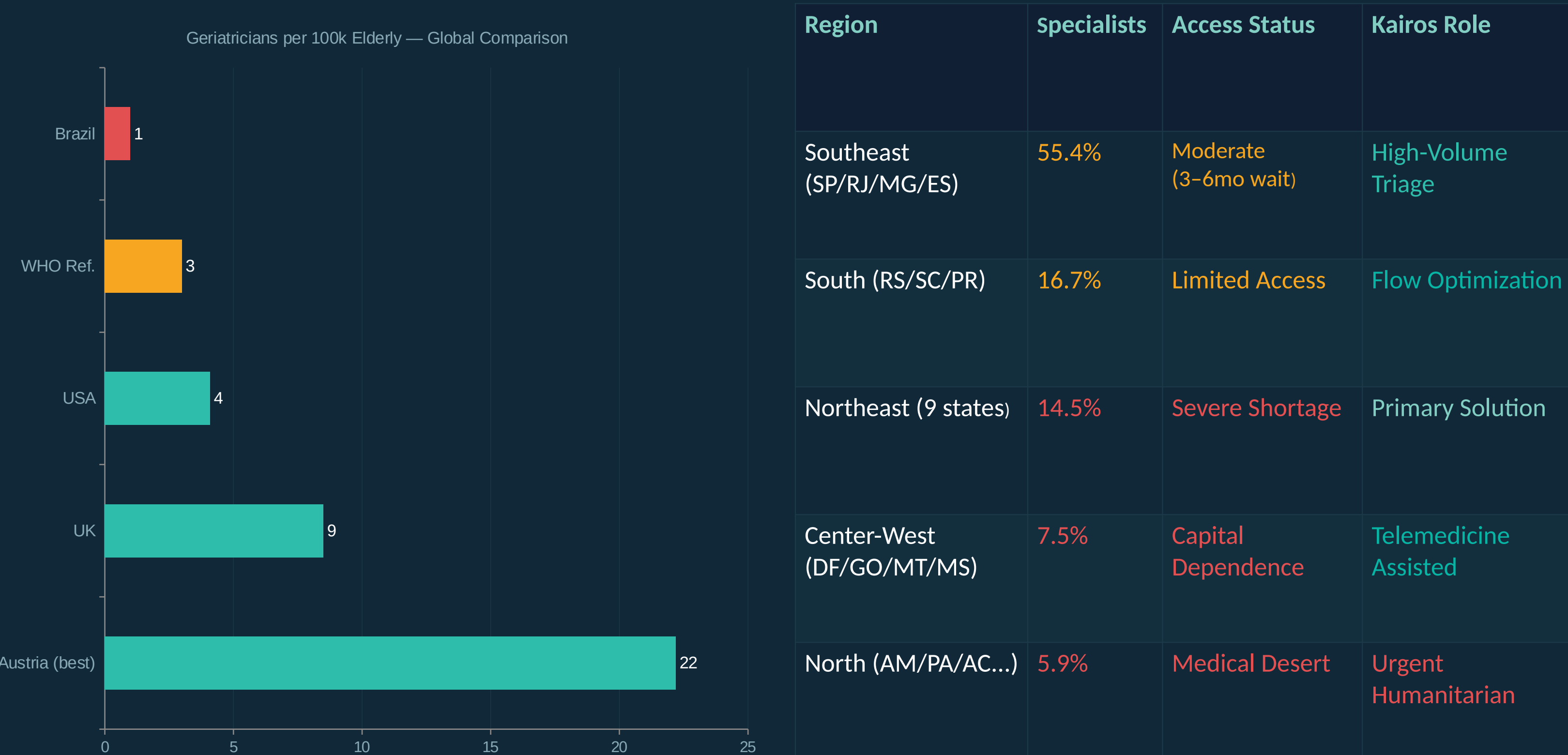
LO1 Analyzing Barriers to Early Diagnosis in Low-Resource Public Health Systems



LO2 Evaluating AI Algorithms for Cognitive Triage Automation & Screening Accuracy



LO3 Demonstrating How Neuroengineering Democratizes Neurological Access in Developing Economies



BARRIERS TO IMPLEMENTATION

Structural

- No national diagnostic registry or triage protocol
- 55.4% of all specialists concentrated in the Southeast
- 165+ years to close the geriatrician gap via training alone
- Clinical
- Poor dementia literacy among primary care teams
- Late-stage diagnosis culture — no triage pathway
- Social
- Absent caregiver support infrastructure in SUS
- Digital exclusion in elderly and rural populations
- Family impoverishment (100% out-of-pocket costs)

ECONOMIC IMPACT

High-Income Countries

Main cost: long-term care & biotech therapies

Challenge: over-utilization of expensive imaging

Brazil (Current)

Main cost: emergency hospitalizations + drug litigation
Patient navigates 5+ specialists before diagnosis

R\$10,000+ monoclonal therapies prescribed at late-stage — therapeutic window already closed. **High cost, zero clinical return.**

CONCLUSION

Law 14,878/2024 cannot be operationalized through analog infrastructure alone.

A **scalable AI-driven triage framework** is the primary architecture to bridge the Invisibility Gap — **transforming paper rights into real-world clinical access** for 1.76M Brazilians.

A replicable blueprint for high-demand, low-resource settings globally — where **neuroengineering must democratize access** where workforce cannot.



PARTNERSHIPS OR COLLABORATIONS? GET IN TOUCH!



Any feedback? Post it here!

Where neuroscience leaves the laboratory to change the journey of care.