



EONFLOW DEEPTech • PREDICTIVE HEALTHCARE

The Biological Digital Twin

Real-time critical health risk
anticipation and proactive clinical
intervention for enterprise operations
and national public healthcare
systems.



PLUG & PLAY ARCHITECTURE



CAUSAL & EXPLAINABLE AI



What Critical Problem Do We Solve?

01 • CRISIS



Preventable Emergencies

Billions wasted treating acute health emergencies detectable weeks in advance.

Late detection drives unsustainable healthcare costs

02 • CONVENTIONAL AI



Lack of AI Transparency

Opaque algorithms produce unverified scores rejected by clinical practitioners.

Zero explainability prevents adoption.

03 • THE SOLUTION



The EonFlow Bio Twin

Explainable causal AI executing real-time biometric mapping with regulatory compliance.

Biologically-based intelligence.

Comprehensive Causal Knowledge Base

10 Biological Strata: Protein pathways, metabolomics, anatomy, and pharmacology.

+12,000

Modeled Diseases

Real-Time

Causal Validation



Equitable Healthcare & Fiscal Sustainability

30%

Coverage & Access Gap

Making specialized clinical insights accessible across 57% underserved rural areas.

>31%

Out-of-Pocket Burden

Pre-symptomatic alerts shield vulnerable households from catastrophic costs.

1.4%

GDP Fiscal Savings

IDB-benchmarked public savings by eliminating 22% of avoidable hospital admissions.



MULTISCALE ARCHITECTURE

Solutions for Individuals, Enterprises & Nations



01 • MICRO LEVEL

Individual & Patient

Hyper-personalized early warning signals combined with immediate preventive guidance.



02 • MESO LEVEL

Enterprise Operations

Objective risk mitigation driving down insurance premiums by drastically reducing severe incidents.



03 • MACRO LEVEL

Population Health

Predictive hospital bed forecasting, critical supply tracking, and national health planning.

One Unified Causal Engine Orchestrating Personal Care, Workforce Safety, and National Resilience



CLINICAL POINT OF CARE

Personalized Alerts & Proactive Intervention



Early Warning

Anticipating sudden health decline prior to visible clinical symptoms.



Fatigue-triggered Breaks

Automated rest cycle recommendations triggered during demanding shifts.



Preventive Referral

Seamless, early triage routing to avoid critical emergency admissions.



Safe Prescription

Immediate algorithmic prevention of adverse drug interactions.

Sub-second clinical decision support protecting doctors and patients alike.

LATENCY: < 38 MILLISECONDS



CRITICAL ENTERPRISE OPERATIONS

Pre-Shift Access Screening & Workforce Safety



Insurance Premiums

Direct reduction in enterprise policy premiums via verified objective risk mitigation.

Measurable Underwriter Savings



Zero Severe Incidents

Automated gate-level access screening for mining, heavy transport, and 24/7 operations.

Zero-Compromise Security



Dynamic Fatigue Management

Crew and shift assignment calculated directly from physiological biometric telemetry.

Objective Fatigue Metrics

Target Deployments: Heavy Transport, Deep Mining, Refineries, and Offshore Critical Sites

IMMEDIATE OPERATIONAL ROI



National Health Security & Risk Forecasting

PILLAR 01

Predictive Budgeting

Dynamic ICU bed allocation and critical pharmaceutical supply planning well before epidemic surges.

PILLAR 02

Regional Health Policy

Precision public health interventions calibrated to localized biological and environmental responses.

PILLAR 03

Epidemic Containment

Advanced causal modeling synthesizing climate, weather shifts, and geographic spread patterns.

PILLAR 04

Fiscal Efficiency

Substantial treasury savings generated by replacing late emergency rescues with early intervention.

Shift public healthcare management from reactive disaster control to algorithmic precision.



MODULAR DEPLOYMENT

Plug & Play Models Tailored to Any Scale

SECTOR: PUBLIC

For Governments

Territorial epidemiological simulators ready for frictionless, secure national deployment.

Zero-Friction Rollout

SECTOR: PRIVATE

For Enterprises

Workplace fitness modules instantly integrated into security turnstiles and gates.

Native Turnstile & ERP Integration

SECTOR: INDIVIDUAL

For Citizens

Direct synchronization with smartwatches and continuous personal telemetry.

Wearable Integration

Continuous adaptability across diverse IT ecosystems

No proprietary hardware lock-in



SCALABLE ECOSYSTEM

Expanding Bio–Cyber Physical Systems



Hardware Synergies

Native integration with certified medical devices and consumer wearables across Latin America.



Modular Interoperability

Fluid, non-intrusive connection to ambient IoT sensors and hospital management software.



Regional Scalability

Rapid deployment engineered to conform with local regulatory requirements and diverse infrastructure.

STRATEGIC REGIONALIZATION IMPACT

EonFlow unifies heterogeneous biomedical devices under one real-time analytical layer, ensuring rapid adoption and immediate regional scale.



APIs: Instant Integration with Existing Systems

STEP 01

Secure Connection

HL7 FHIR R5 international standard with native SAP and ERP compatibility.

STEP 02

Causal Processing

High-fidelity biomedical inference executed in under 80 milliseconds.

STEP 03

Native Displays

Direct alerts inside Epic, Cerner, Legacy Health Information System, SIHCE, or site turnstiles.

REAL-TIME API PAYLOAD:

 Risk Probability

 Disease Profiling

 LOINC / SNOMED / ICD-11

 Care Pathway



GOVERNANCE & SECURITY

Medical Board Validation & Regulatory Compliance



Dual Medical Sign-off

All models audited and certified by independent licensed medical boards.



Intellectual Property

Official SafeCreative Reg. N° 2606136094012 under EonFlow ownership.



Security & Privacy

Bank-grade TLS 1.3 / AES-256 encryption meeting strict HIPAA & GDPR compliance.

Minimized data liability: completely anonymized clinical telemetry processing.

LEGAL & MEDICAL AUDIT READY



Fast-Track Pilot Deployment: 6 to 8 Weeks

WEEK 01

Pilot Dataset

Anonymized baseline telemetry ingestion and initial mapping.

WEEK 02

Calibration

Fine-tuning physiological thresholds and causal validation rules.

WEEK 03 - 05

Integration

Live sandboxed connection with turnstiles or clinical interfaces.

WEEK 06

ROI Validation

Delivery of verified risk mitigation metrics and financial savings.

Public sector pilot implementations eligible for multilateral development funding.

TECHNICAL COOPERATION ELIGIBLE

Begin the Transition to Predictive Health



30-Minute Technical Demo

Schedule an executive session to evaluate the Biological Twin with representative data from your institution.

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