

Health Report Insight Engine

Transforming medical data into actionable intelligence

Diagnostic Dilemma

Labs provide numbers; people need meaning and context



Insight Journey

Our interactive demo walks through a complete user journey: upload lab panel → auto-normalization → dashboard with traffic-light markers → trend sparklines → risk estimate with explanation → exportable physician summary.



Early health risk detection visualization



Explainable insights with actionable summary



Seamless data upload and normalization

Pattern Recognition

Combining rule-based clinical patterns with explainable ML reveals early risk signals with transparent reasoning.



Complex biomarker integration

Composite biomarkers and model explanations provide greater utility than single-threshold flags. By analyzing trends and ratios, the system captures nuanced health patterns that simple thresholds miss.



Transformative framework

The approach creates a powerful system connecting biomarkers and symptoms to features, then applying rules and ML to generate interpretable risk assessments with clear explanations of reasoning.



Human-centered explainability

In clinical AI, insights must map directly to clinical scenarios and constraints to build trust. Transparent explanations ensure healthcare providers understand the reasoning behind risk assessments.

Intelligent Interface



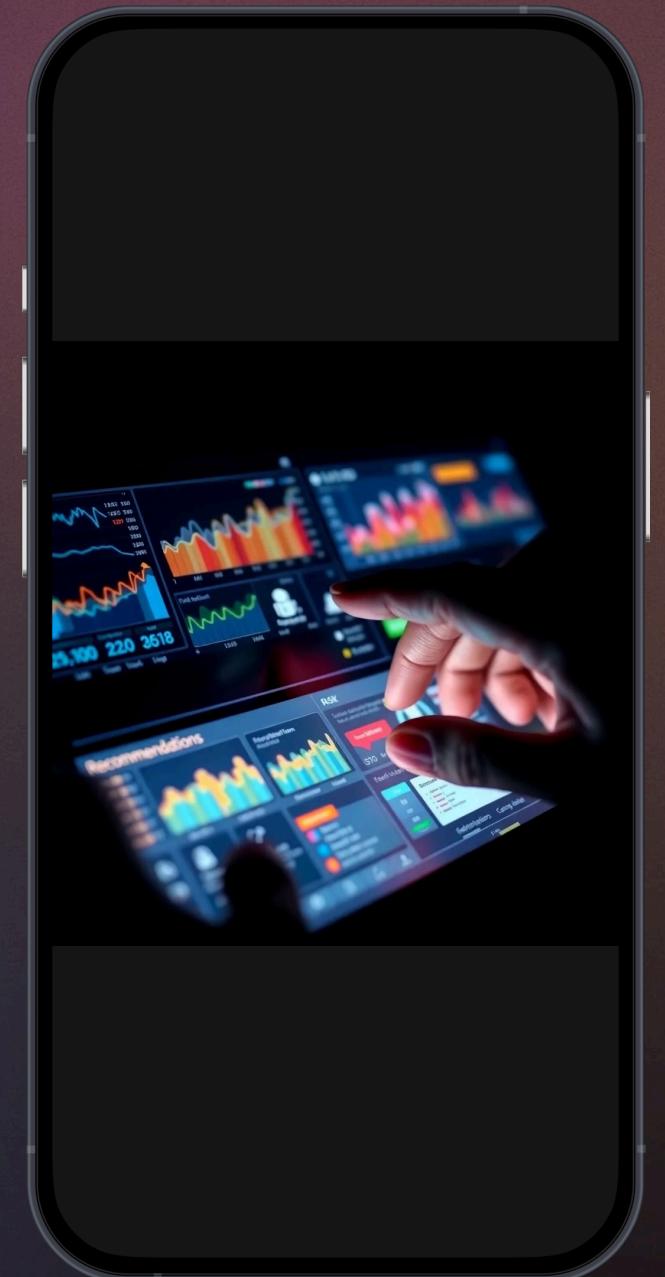
Risk prediction

Generates predictive risk scores with feature attributions to identify key drivers of risk.



Actionable insights

Provides plain-language recommendations for monitoring, lifestyle changes, and clinician discussions.



Trend analysis

Visualizes biomarker trends against reference ranges with correlation to symptom trajectories.



Data processing

Ingests structured lab reports and normalizes units/ranges for consistent analysis and interpretation.

Clinical validation

We will validate clinical utility and prepare for real-world use through data, evaluation, and governance.



Thorough validation

Implement temporal cross-validation, calibration checks, and human-in-the-loop review for new rules.



Safety measures

Refine disclaimers, confidence bands, and uncertainty messaging to ensure clinical safety.



Expanded data

Expand normalized test catalogs with age/sex-specific ranges and longitudinal baselines across more panels.



Clinician workflows

Design insights that integrate seamlessly with existing clinical workflows for maximum utility.



Structured roadmap

Progress from MVP to deployment with clear labeling as informational guidance, emphasizing explainability.



Strategic partnerships

Collaborate with labs and clinics for feedback and prepare documentation for clinical evaluation studies.