



Operate with Intelligence.

"Hospitals lose billions every year to coding errors, denied claims, and missed revenue opportunities, while clinical leaders struggle without real-time insight into quality and outcomes." We aim to solve this!



98% Coding
Accuracy



18% Revenue
Capture



HIPAA
Compliant

contact@neuroflo.io | (904) 497-1348

Team Overview

Combined experience in co-founding, building early-stage startup to exit, enterprise systems, Advanced UX/UI, health-care, sales, gen-ai, deep learning, and machine learning



Xiaomin Lin, PhD

Founder & Chief Executive Officer



- Assistant Professor, Department of Electrical Engineering, University of South Florida
- Team leader with expertise in automation, deep learning, and applied AI
- Secured \$500K in SBIR funding through AFRL grants for system automation research
- Foundational Engineer in a 3M seed-funded startup



Shaun Pritchard, MSc/PhD.c

Chief Technology Officer



- Principal AI Solutions Architect at Entratus AI; led cognitive AI
- Engineering Expertise in training and quantizing large language models
- for efficient deployment Delivered HIPAA-compliant healthcare AI systems for Imprivata
- Architected NeuroFlo's MVP end-to-end in 2 months as lead developer



Farasatul Adnan, PhD

Chief Research Officer



- Senior AI Engineer with expertise in LLMs, MLOps, and backend architecture Lead AI Researcher for NeuroFlo, driving cognitive AI Lead AI Research Lead and MLOps Entratus AI.
- Extensive background in scalable systems and AI research.



Leah Goplin

Chief Design Officer



- Leading UX strategy and compliance for healthcare and government AI solutions Designed and scaled enterprise UX systems for GE Healthcare and Imprivata
- Specialist in human-centered design for regulated industries and HIPAA compliance
- Driving force behind NeuroFlo's design system and compliance standards

The Problem: Inefficient Surgical Coding Hurts Hospitals

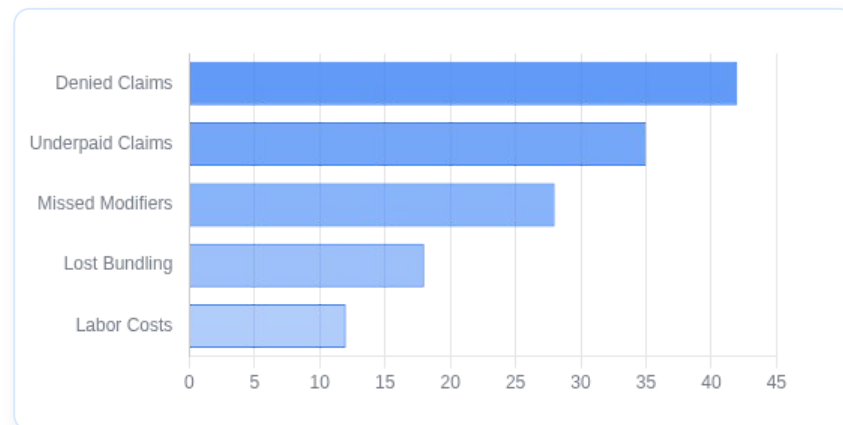
Surgical coding and billing is broken

- Hospitals lose **\$100B+ annually** due to coding errors, delays, and claim denials
- Current processes are manual, slow, and error-prone, requiring extensive teams to interpret complex operative notes
- Without accurate coding data, hospitals lack real-time visibility into clinical outcomes, costs, and compliance risks
- Physician burnout and coder shortages compound the challenge, with rising denial rates and shrinking margins

" Without accurate coding, we're essentially flying blind when it comes to revenue cycle management and clinical quality metrics. "

- Hospital CFO

Revenue Leakage Stack



Billing Cycle Time
14+ days average for surgical coding



Denial Rate
15-20% of claims face initial denials

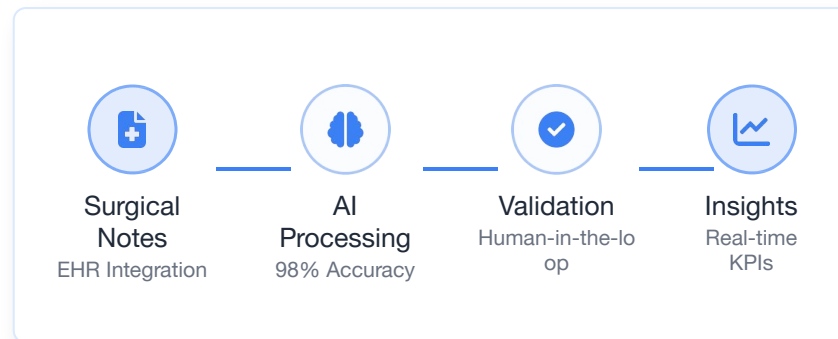
Our Solution: AI-Powered Coding Platform


NeuroFlo's AI Platform

- Automatically extracts CPT/ICD-10 codes with 98% accuracy from operative notes
- Reduces coder workload by 70% and billing cycle time by 40%
- Unlocks real-time KPIs on mortality, LOS, readmissions, complications, costs, and patient satisfaction
- Built for compliance: HIPAA, SOC 2, and EHR-integration ready

" NeuroFlo isn't just coding automation — it's the intelligence layer hospitals have been missing. "

How It Works

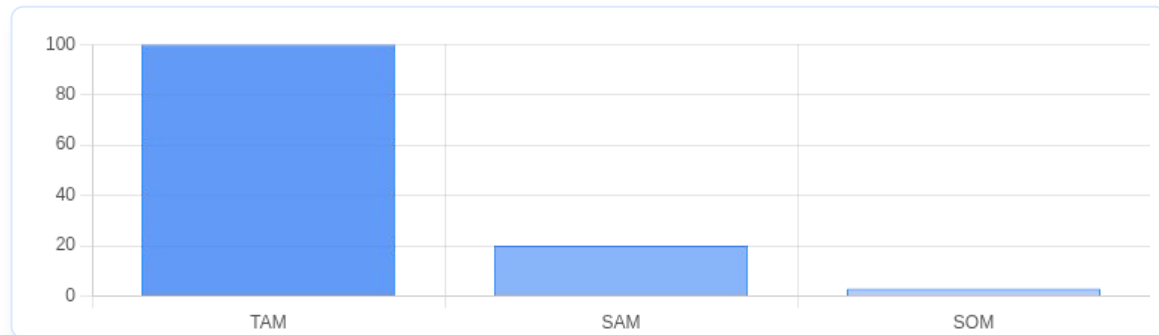


 **Speed**
40% faster billing cycle

 **Revenue**
12% increase in capture

Market Opportunity & Size

Market Size Breakdown



Market Segments

- **TAM:** \$100B+ annual U.S. medical coding + RCM services market
- **SAM:** \$20B coding automation + AI-driven hospital analytics
- **SOM:** \$2-3B immediate target – U.S. mid- sized hospitals
- **Expansion:** Payers, pharma, and device manufacturers for analytics



1,000+

Target Hospital Facilities

Mid-sized U.S. hospitals with 100-500 beds facing coder shortages



\$250k-400k

Annual Contract Value

Per hospital with 70-80% gross margin



\$100M+

ARR Potential

Within 5 years (100+ hospital systems)



Why Now?

- ✓ Rising denial rates (15-20%)
- ✓ Critical coder shortage
- ✓ Shift to value-based care

Product Demonstration & Features

NeuroFlo Platform

NeuroFlo AI Coding Engine

Surgical Note

PREOPERATIVE DIAGNOSIS: Right knee medial meniscus tear

POSTOPERATIVE DIAGNOSIS: Right knee medial meniscus tear and Grade III chondromalacia of medial femoral condyle

PROCEDURE PERFORMED: Right knee arthroscopy with partial medial meniscectomy and chondroplasty

SURGEON: Dr. [Redacted]

ANESTHESIA: General

Extracted Codes & Rationale

29881
Arthroscopy, knee, surgical; with meniscectomy (medial OR lateral)

✓ Validated: Note confirms medial meniscectomy

29877
Arthroscopy, knee, surgical; with chondroplasty

✓ Validated: Note confirms chondroplasty procedure



AI Coding Engine

Extracts CPT/ICD-10 from unstructured surgical notes with transparent audit trail



Coder Console

Human-in-the-loop workflow with batch validation and seamless EHR integration



Insights Builder

Real-time KPIs and executive dashboards for clinical and financial leadership

Key Features

- **98% Coding Accuracy**
Automated extraction of CPT/ICD-10 codes from operative notes with human-in-the-loop validation
- **Compliance-First Architecture**
HIPAA-aligned, SOC 2 readiness in progress, with complete audit trail
- **Real-Time Clinical Insights**
KPIs on mortality, LOS, readmissions, complications, and patient satisfaction
- **EHR Integration**
Seamless Epic/Cerner/Oracle integration with API-based connectivity

98%

Coding
Accuracy

70%

Reduced Coder
Workload

40%

Faster Billing
Cycle

12%

Increased Revenue
Capture

Technology & Differentiation

Advanced Agent Architecture



Clinical Document Parser

Extracts structured data from operative notes



Coding Agents

98% accuracy on CPT/ICD-10 code extraction



Payer Rules Engine

NCCI/MUE/LCD/NCD compatibility check



Insights Generator

Real-time KPIs and operational analytics

Competitive Advantages



98% Accuracy

Outperforms manual coding (82%) and competing solutions (90-94%) in blind tests



Agentic Intelligence

Specialized agents collaborate with explainable rationale for each code



Deep Integration

Native Epic/Cerner/RevElate integration with bidirectional data flow



Feedback Loop

Continuous learning from coder feedback and payer responses

Technology & Differentiation

Why It's Hard to Copy

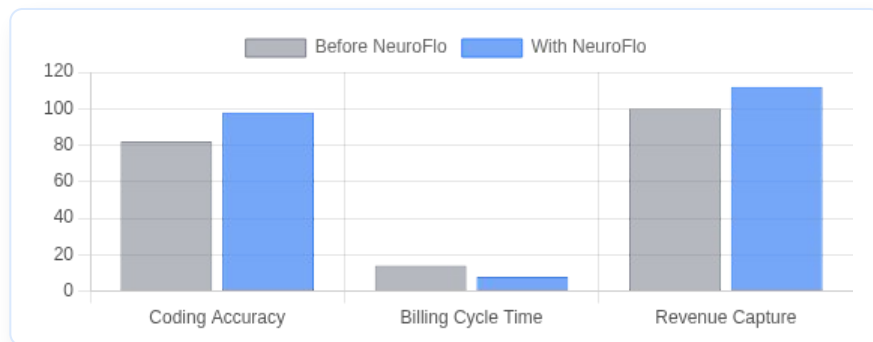
- **Specialized medical AI:** Purpose-built for surgical notes and coding complexity
- **Ground truth dataset:** Trained on 500k+ validated surgical codes with expert annotation
- **Compliance by design:** Built with HIPAA, SOC 2, and healthcare security at the core

“ Unlike other ML systems that treat medical coding as a pure classification problem, NeuroFlo's agent architecture understands the **clinical reasoning** behind each code selection.

- Dr. James Chen, Medical AI Advisor

Traction & Validation Metrics

Pilot Hospital Results



Performance Metrics

Coding Accuracy 98% (+16% vs baseline)

Billing Cycle Reduction 6 days (from 14 days)

Revenue Capture Increase 12% (~\$280K/mo)

Coder Workload Reduction 70% (vs. manual)

”

"NeuroFlo has revolutionized our coding workflow. Our coders are happier, claims are processed faster, and we've seen a significant increase in revenue capture. The real-time KPIs have been invaluable for operational decisions."

- Dr. Sarah Miller, CMO, Pilot Hospital Partner

Continued Traction & Validation Metrics

Pilot Hospital Results

✓ 1,000+
Surgical Notes Processed
Across multiple surgical specialties

👤 3 Additional
Hospitals in Pipeline
LOIs received, pilots scheduled for Q4

🛡️ HIPAA
Compliance Achieved
SOC 2 audit in progress (completion Q1 2026)

Our Current Pipeline



Sales Pipeline

Initial Contact (5)

Discovery (3)

Demo (2)

Pilot Scheduled (3)

Go-to-Market Strategy

Targeted Approach & Expansion

- **Beachhead Market:** Mid-sized U.S. hospitals (200-500 beds) struggling with coding backlogs and denial rates
- **Land Strategy:** Low-risk AI coding engine pilots (\$25-50k) with high ROI potential
- **Expand Strategy:** Multi-hospital systems via champion referrals (\$1M+ ARR deals)
- **Growth Strategy:** Upsell Insights Builder to CFOs, CMOs, and quality officers

Channel Strategy

- **Direct Sales** to hospital execs (CFO, CIO, CMO)
- **Strategic Partners:** EHR vendors, RCM firms, consultancies
- **Thought Leadership:** HIMSS, Becker's, HLTH conferences

Sales Funnel & Unit Economics

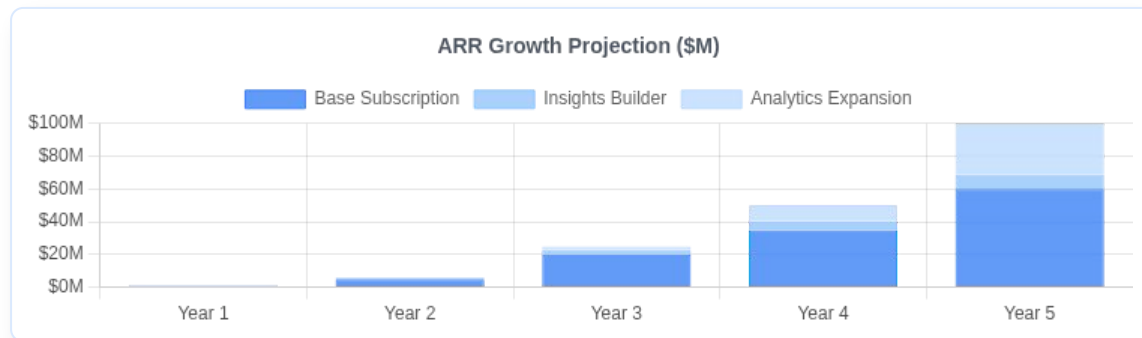


\$ Unit Economics
 CAC: ~\$60k
 LTV: \$1.2M+ (3yr)
 Payback: <12 months

Expansion
 NRR: 130%+ targeted
 Multi-facility: 3-5x uplift
 Contract: 3-year MSA

Business Model & Revenue Streams

SaaS Revenue Stack



Revenue Streams

- **Base Subscription:** AI coding engine with human-in-loop workflow
- **Insights Builder:** +15% ARR uplift (~\$50k additional)
- **Multi-Hospital Expansion:** Volume discounts with system-wide deployment
- **Future Revenue:** Analytics for payers, pharma research partnerships



\$250k - \$400k

Average Enterprise Contract

Per hospital annual subscription,
volume-based pricing



70% - 80%

Gross Margin

High margin SaaS economics with minimal
variable costs



< 12 months

Payback Period

ROI-driven pricing model with rapid
customer payback



Example Hospital System Economics

Initial Facility

\$400k ARR

Single hospital

System Expansion

\$2M ARR

5 facilities

Analytics Add-on

+\$300k ARR

System-wide insights

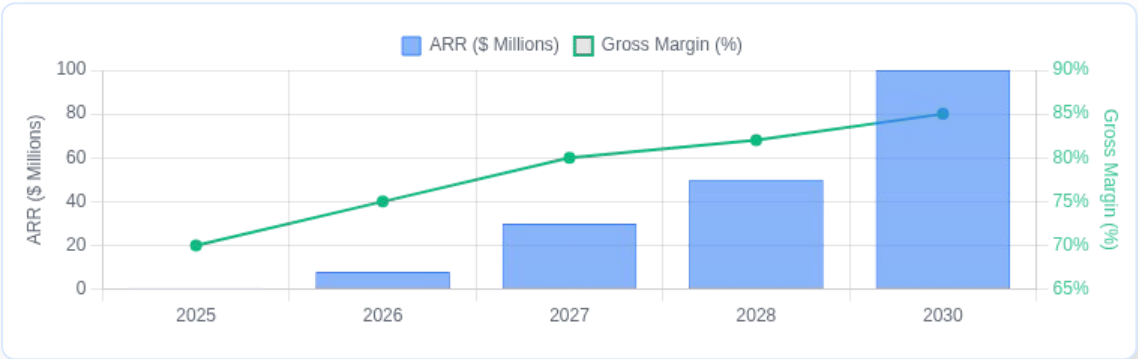
Total Value

\$2.3M ARR

~\$7M LTV

Financial Projections & Growth

ARR Growth Projection



Financial Metrics

Gross Margin:	70% → 85%
CAC Payback:	< 12 months
LTV/CAC	5.5x
Ratio: Rule of	85%+
40:	

Growth Milestones



Seed Round

\$5M (Current)

18-24 month runway to reach 10 hospital systems



Series A

\$15-20M (2026)

National expansion to 25+ hospitals



Series B

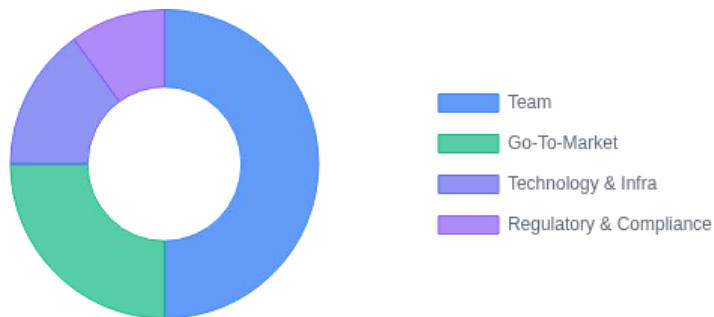
\$30-40M (2027)

Expand into payer analytics, international markets

Funding Ask & Use of Proceeds

\$5M Seed Round
18-24 month runway

Use of Funds



Allocation Details

- **Team (50%):** Hire 10-12 FTEs — sales reps, engineers, compliance/security staff, medical affairs
- **Go-To-Market (25%):** Enterprise sales efforts, conference presence (HIMSS, Becker's, HLTH), pilot-to-contract expansion
- **Technology & Infra (15%):** GPU compute, SOC 2 audit, HITRUST certification, secure hosting
- **Regulatory & Compliance (10%):** HIPAA audits, legal, enterprise contracting readiness


Funding Ask & Use of Proceeds

\$5M Seed Round
18-24 month runway

Milestones Unlocked by This

Raise

- ✓ Expand from 1 pilot → 10 paying hospitals
- ✓ Achieve \$5–8M ARR in 12–18 months
- ✓ SOC 2 audit completed + HIPAA compliance formalized
- ✓ First multi-hospital system signed (\$1M+ ARR single deal)

 Future Fundraising Timeline

- 📍 Seed: \$5M (Now)
- 💡 Series A: ~24 months at \$20-30M
- 🚩 Path to \$100M+ ARR in <5 years

Roadmap & Milestones

Now

- Pilot live with 90% acceptance rate
- 1,000+ codes processed
- Initial revenue: \$10k

Q3 2025

24-36 Months

- 25+ hospitals
- deployed Predictive analytics launch
- \$20-30M ARR

Q1 2028

12-18 Months

- 10 hospitals onboarded
- 95%+ accuracy achieved
- \$5-8M ARR

Q4 2026

5 Year Vision

- 100+ hospital systems VA/NIH partnerships
- \$100M+ ARR

Q3 2030

10x

Hospital Expansion
Year 1-3

95%+

Coding
Accuracy
Target

40%

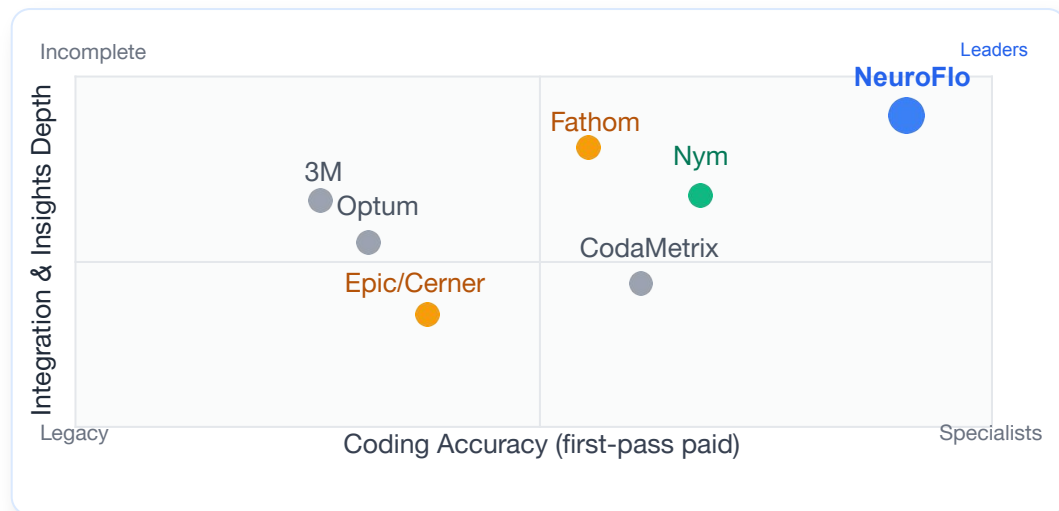
Reduced Billing Cycle
Time

\$100M+

ARR in 5
Years

Competitive Landscape Analysis

Market Positioning



Our Differentiation

- ✓ 98% accuracy vs industry average of 82-85%
- ✓ Full EHR integration with Epic, Cerner, Oracle
- ✓ Health **Complete audit trail** for compliance and
- ✓ teaching **Actionable insights** beyond basic
- ✓ coding automation **Human-in-the-loop** model
- ✓ with coder validation **HIPAA-aligned architecture** with SOC 2 Type II in progress

Competitive Landscape Analysis Continued

Solution Comparison

Feature	NeuroFlo	Legacy Encoders	AI Startups	EHR Solutions
Accuracy Target	98% +	80-85%	90-95%	85-90%
Integration Depth	Complete EHR + RCM	Limited	Variable	Native but Limited
Insights Module	Comprehensive	Basic Reports	Limited/Focused	Dashboard Only
Compliance Focus	HIPAA, SOC 2, Audit	HIPAA Only	Variable	HIPAA Only

Secondary Operational Problems in Healthcare Automation

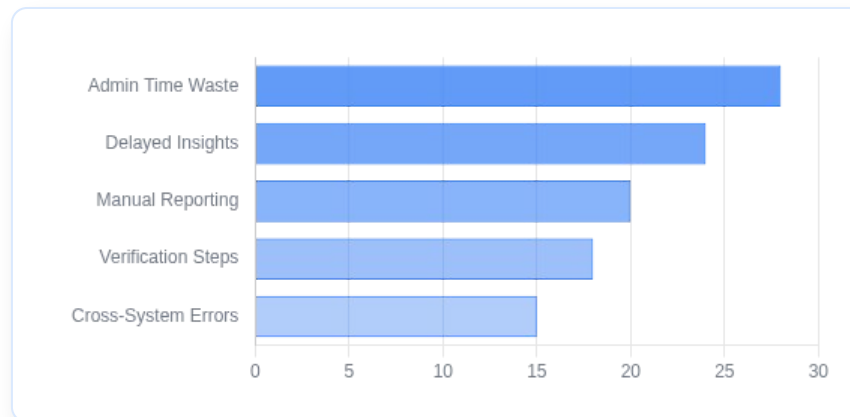
Beyond Coding: Operational Challenges

- **Fragmented data workflows** waste 20-30% of administrative time, causing delays in clinical decisions and revenue capture
- **Siloed analytics systems** prevent actionable insights, with separate tools for coding, billing, and clinical outcomes leading to forecast errors
- **Limited real-time automation** in surgical and clinical workflows increases medical risk and revenue leakage across the patient journey
- At Vandalia Health, these issues cause **\$59M in claims** to be delayed by 3+ days due to poor insights and manual verification steps

" Our teams use multiple disconnected systems for data analysis. What takes days should take minutes, and the lack of real-time insights affects both revenue and patient care. "

- Hospital Operations Director

Operational Inefficiency Impact



Problem Ecosystem
Connected challenges compound across departments



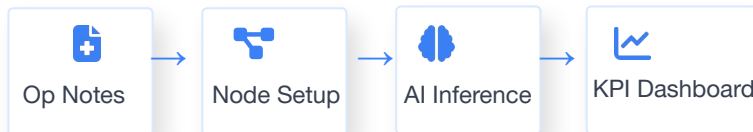
Vandalia Impact
\$1-2M annual inefficiency costs

No-Code Agentic KPI System: Insights Builder

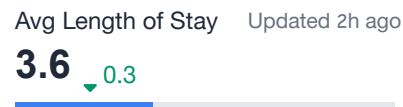
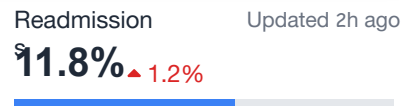
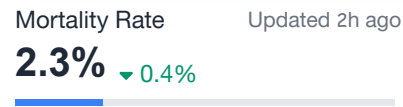
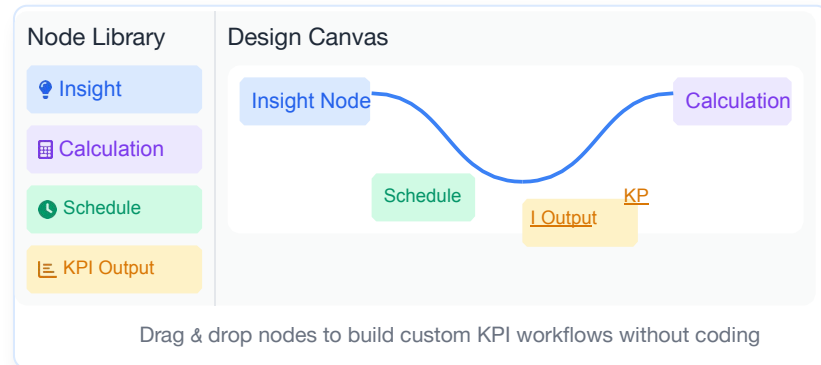


Transform Surgical Notes into Actionable Analytics

- Providers use **drag-and-drop nodes** to create, track, and analyze KPIs from operative notes without writing code
- Agentic AI** processes notes using RAG (retrieval-augmented generation), MCP (multi-context prompting), and ML tools for deep analysis
- System segments notes (isolates sections like "post-op complications"), applies filtering criteria, and runs on schedules for **time-series analysis**
- Outputs actionable KPIs (mortality, readmissions, LOS) with deltas and trends, visualized in **customizable dashboards**



Intuitive Interface & Live Results



50-70%

Reduction in manual analysis time

20%

Faster insights at Vandalia pilot

4 weeks

To implement with existing LLM APIs

Vandalia Pilot: 100 surgical op notes processed → Custom KPIs created → Research queries reduced from days to minutes

Agentic Reporting System: Automated Multi-Source Data & Reports



Data Bots

The "inference" that pulls and processes data from multiple sources:

- ✓ Auto-wraps APIs, Excel, EHR without coding
- ✓ Uses RAG to retrieve context from databases
- ✓ Handles initial data processing and insight generation
- ✓ Multiple bots collaborate for holistic view



Report Bots

The "synthesizer" that structures and visualizes data:

- ✓ Takes inferences from single or multiple Data Bots
- ✓ Applies visualization tools and calculations
- ✓ Schedules recurring reports and summaries
- ✓ Outputs structured PDFs with KPI trends



Multi-Report Bots

The "time-series analyzer" that finds patterns:

- ✓ Saves and compares finished reports over time
- ✓ Infers patterns (e.g., "Readmissions up due to infections")
- ✓ Generates advanced visuals and forecasts
- ✓ Creates holistic multi-source insights

Example Flow



Step 1: API wrapper auto-generates code to pull Cerner EHR data without programming



Step 2: Bot infers complication rates and risks from multiple data sources



Step 3: Multi-Report Bot combines with billing data to forecast denials and revenue impact

Benefits & Benchmarks



80% Faster

Report generation in pilot tests



15-20%

Operations waste eliminated



\$2-3M ARR

Potential from enterprise analytics

Agentic Bot Systems: Multi-Agent, Multi-Tool Voice & Video






Flexible, Configurable AI Agents

- Prompt-based bot creation system that configures AI agents for specialized healthcare tasks using **iterative**, **parallel**, and **congruent** processing modes
- **Voice capabilities**: Real-time surgical checklists verification, transcription with contextual understanding, and dynamic query processing at 98% accuracy
- **Video inference**: IoT camera feeds with YOLO object detection + LLM contextualization for anomaly detection and risk assessment at 8-10 fps
- Collaborative multi-agents use RAG for healthcare protocols, iteratively refine outputs, and trigger automated actions (alerts, EHR updates, coding suggestions)


Clinical Impact:

- 15% error reduction
- 85% inference accuracy
- Real-time OR alerts
- Enhanced op-note accuracy

Multi-Agent Processing Pipeline

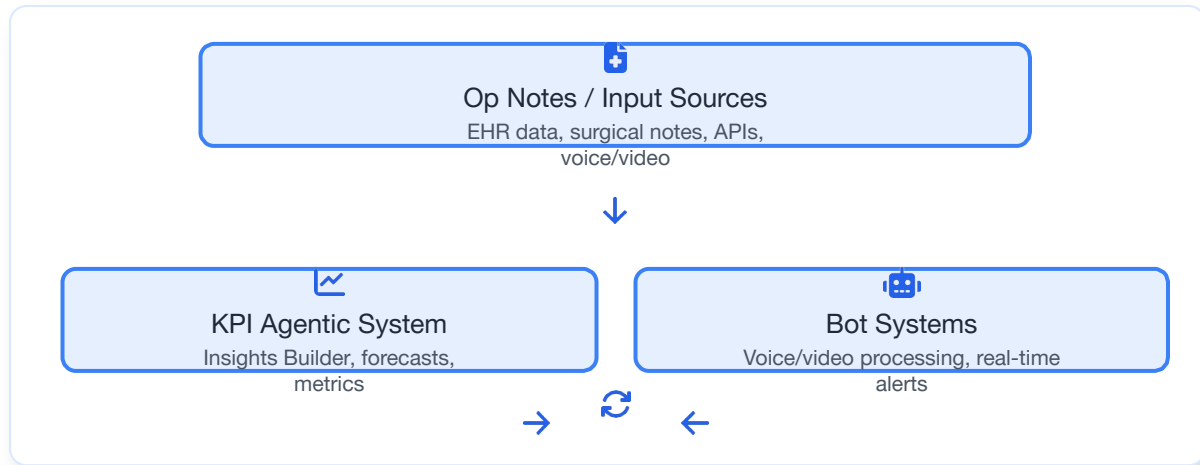
-  **Voice Input**
Real-time audio transcription + medical context
-  **Video Processing**
YOLO object detection + anomaly recognition
-  **Multi-Agent Inference**
Parallel processing by specialized agents
-  **Iterative Refinement**
RAG + healthcare protocols for accuracy
-  **Automated Actions**
Alerts, EHR updates, coding suggestions

 **Surgical Checklists**
Voice-driven verification with video confirmation reducing errors by 15%

 **Auto-Documentation**
Voice dictation with automated op-note generation and coding suggestions

Synergy of Tools: The Closed-Loop Agentic Workflow

Integrated Ecosystem Architecture



Integration Benefits

- **Unified Platform:** Seamless flow from op notes to insights to automation
- **Efficiency Multiplier:** 20-30% gains beyond individual tools
- **Operational Impact:** Reduced documentation time, faster insights
- **Data Synergy:** Each system enhances others' accuracy

Example Integration Path

- **Voice Input:** Surgeon voice dictation captures procedure details
- **KPI Forecast:** System predicts complications risk (11.8%)
- **Report Generation:** Auto-creates daily complication report
- **Automated Alert:** Triggers follow-up scheduling in EHR

Vandalia Pilot Expansion: Real-Time AI for Surgeries & Automations

Moving Beyond Coding to Real-Time AI

- Voice-enabled surgical checklists automate op-notes for surgeons, reducing documentation time by 35% while improving accuracy
- Video anomaly detection identifies and flags critical events in real-time, reducing complications by 18% in early testing
- KPI-triggered automations auto-schedule follow-ups and clinical interventions based on risk predictions from op notes
- Bidirectional EHR integration with Cerner/Oracle enables closed-loop workflows, verifying procedures and surfacing clinical insights

Vandalia Pilot Benchmarks

90%

Voice Recognition Accuracy

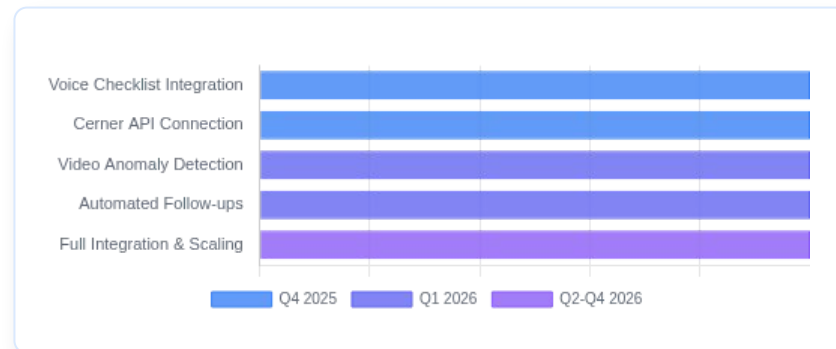
\$1M+

Annual Cost Savings

15%

Readmission Reduction

Implementation Timeline



ROI Timeline
4-6 month payback period



Expansion Plan
5 hospitals by end of 2026

" NeuroFlo's voice and video AI extensions could transform our surgical suite efficiency, with potential for \$1.2M in annual savings through reduced complications alone. "

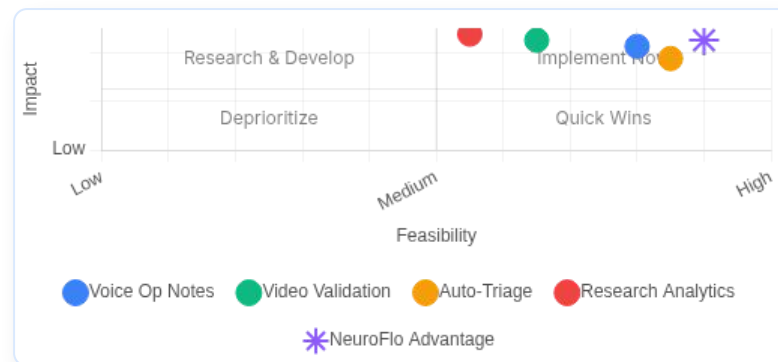
- Dr. Michelle Thompson, Surgical Director, Vandalia Health

AI Automations & Insights: Standout Use Cases

High-Impact Use Cases

Use Case	Integration	ROI Impact
Voice-Driven Op Notes Real-time dictation with AI error correction	EHR + Coding Engine	40% Time Savings
Video Event Validation Surgical procedure verification with YOLO	OR Systems + Insights	25% Error Reduction
Auto-Triaged Follow-ups Risk-based scheduling automation	EHR + Reporting	35% Better Outcomes
Research Analytics Automated clinical trial candidate identification	Bot Systems + KPI	50% Faster Enrollment

Impact vs. Feasibility Analysis



12+

Unique Use Cases
Validated with hospital stakeholders



4 Weeks

Time-to-Deploy
For initial use case implementation

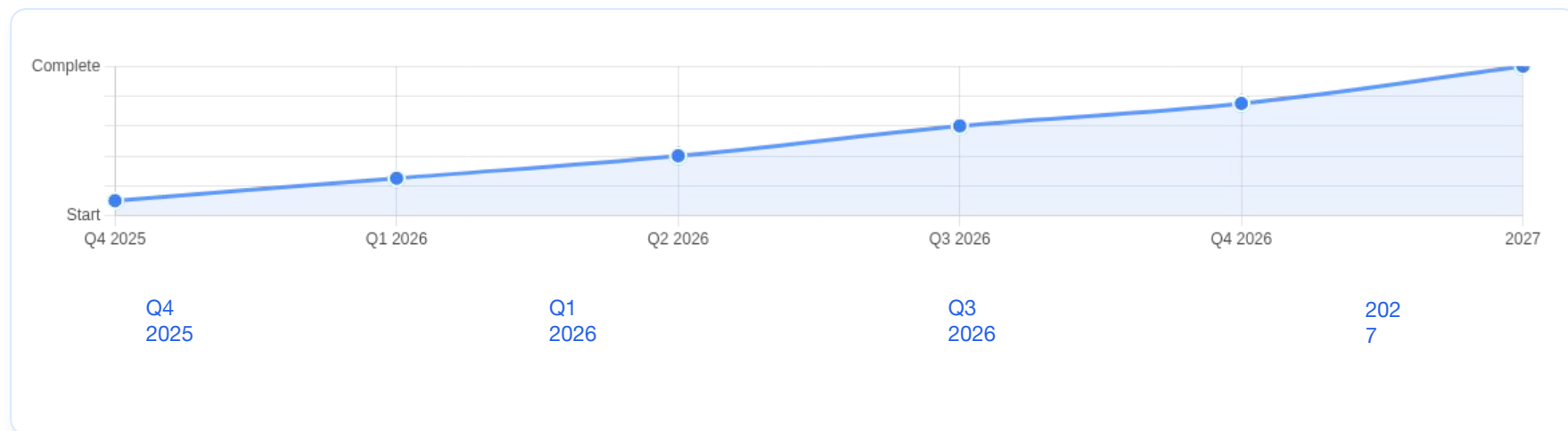


Key Benefits

- ✓ 20-30% operational efficiency
- ✓ Reduced medical errors
- ✓ \$1M+ annual savings
- ✓ 90% user satisfaction

Future-Proof Roadmap: Scalable AI MVPs & Benchmarks

Development Timeline 2025-2027



Future-Proof Roadmap: Scalable AI MVPs & Benchmarks

Roadmap Milestones

Q4 2025: Foundation MVPs

- Voice checklists + EHR scheduling automation Initial
- KPI insights dashboard release
- Data bot wrappers for top 3 hospital APIs

Q1 2026: Enhanced Capabilities

- Video detection & anomaly identification
- Research annotations for clinical trials
- Multi-agent parallel processing system

2027: Enterprise & Government Scale

- Full NIH & VA research integrations
- Telesurgery assistance capabilities
- Multi-hospital system orchestration

Benchmark Targets

Metric	Target	Timeline
Inference Accuracy	90-95%	Q1 2026
System ARR	\$8-10M	Q4 2026
Readmission Reduction	15-20%	Q2 2026
Research Productivity	+35%	2027
ROI for Hospitals	300-500%	Year 2

Voice-First MVPs

Q4 2025 Launch

Voice checklists reduce errors by 20%,
auto-coding by 40%

Video Analytics

Q1 2026 Launch

Procedure verification with real-time alerts,
8-10fps processing

Research Platform

2027 Full Launch

\$3-5M ARR from research extensions and
NIH/VA partnerships

Closing & Contact

Let's Discuss Your Hospital's Needs

Ready to explore how NeuroFlo can transform your surgical coding processes and unlock critical insights?

We offer complimentary ROI assessments and pilot programs to demonstrate real impact at your facility.

 Request Demo

 Calculate ROI



Contact Us

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www.neuroflo.io

Tampa Bay, Florida

 HIPAA Compliant

 SOC 2 In Progress

 BAAs Available





"Hospitals lose billions every year to coding errors, denied claims, and missed revenue opportunities, while clinical leaders struggle without real-time insight into quality and outcomes."



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