



Modern **cardio healthcare** platform



#### Team Composition:

3 Senior Engineers,  
1 Project Manager



#### Project Duration:

6 months (fixed scope)  
& ongoing support phase



#### Tech Stack:

Angular, Node.JS,  
Rails

## Project Overview

**Heartbeat Health is a digital-first cardio platform transforming cardiovascular care for high-risk individuals.** It enables early risk detection, remote diagnostics, and virtual treatment through smart device integration, EMR access, and on-demand consultations—anytime, anywhere.

## Business Challenges

- **Data Security & Confidentiality:** Handling sensitive health information required HIPAA-compliant architecture and secure data transmission.
- **Stable Communication Channels:** The platform needed to support emails, video calls, chat, and third-party device integration without latency or disruption.
- **User Experience:** The UI had to be intuitive, easy to navigate, and optimized for remote medical interactions across diverse user groups.

## Solutions Delivered

- **HIPAA Compliance & Stripe Payments:** Ensured all data remained secure and transactions were safe for users by integrating HIPAA-compliant standards and Stripe for digital payments.
- **Integrated Communication Tools:** Employed WebSocket for efficient, real-time communication, and integrated MailChimp for reliable email functionality.
- **Modern User Interface:** Built with HTML5, jQuery, Bootstrap, and Less, the application featured a context menu system for easy navigation and deployed on Heroku for high performance.
- **EMR Integration:** Integrated Athena EMR to streamline access to patient records and support real-time care management and reporting.

## Results & Impact

- **25% drop in CVD-related hospitalizations** and unnecessary diagnostics
- **Effective virtual-first care:** same-day echos and remote diagnoses
- **Better healthcare access** and improved patient experience
- **Potential to save 46,000 lives annually** through proactive hypertension care

## Conclusion

- **Heartbeat Health, built with Techverx, delivers secure, digital cardiology care**—bridging gaps and enabling scalable, virtual-first healthcare.