VivaHeart.AI:

Empowering Women Smokers with Early Heart Disease Detection

Targeted for women at risk, VivaHeart provides tailored, AI-driven insights to catch heart disease before it's too late.

Prepared By: Carmen Pena

The Urgent Need for Early Detection

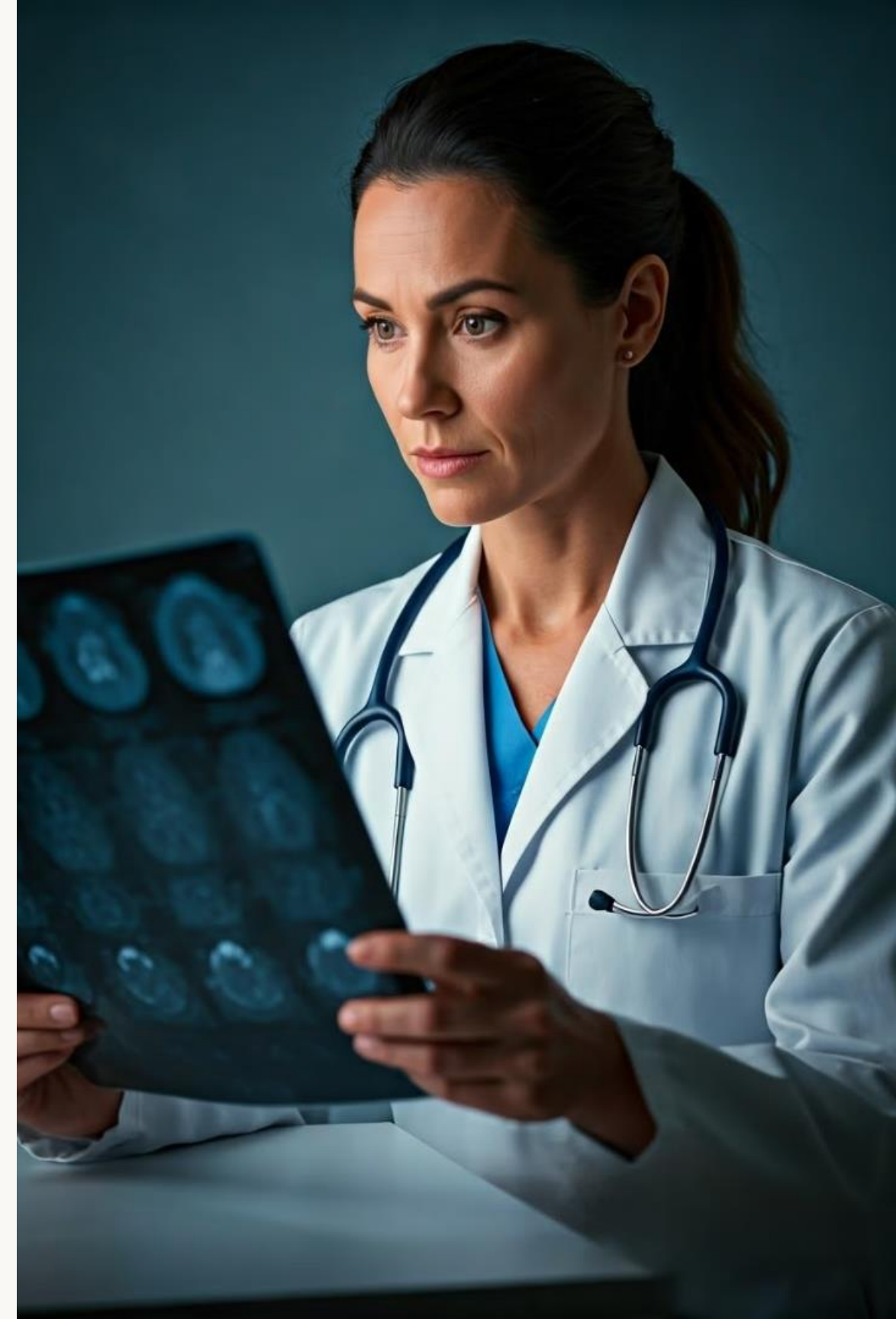**1**   ## High–Risk Demographics

Women smokers between the ages of 20 to 60 years old are at a higher risk of developing coronary artery disease, yet detection in this group is often delayed.

2   ## Alarming Statistics

In Greece, Germany, and Spain, female smokers range from 20%-27%. Action is needed.

3   ## Diagnostic Challenges

50% of women's heart disease cases are misdiagnosed. We must improve detection methods.

Understanding Our Audience

Dr. Sarah Anderson

Experienced cardiologist in Athens, Greece. Struggles with diagnosing subtle heart disease in women.

- **30%-40%** of her time diagnosing female patients at heart risk, with around **10%-15%** of those cases potentially resulting in missed diagnoses due to the limitations of current diagnostic tools

Lucia Bianchi

58-year-old teacher and smoker. Concerned about heart health but lacks tailored diagnostic tools.

- **60%-80%** of long-term smokers report difficulty quitting due to stress and emotional triggers.

Key Challenges

40%-50% of female smokers feel medical advice is inadequate. **60%-70%** struggle with lifestyle changes.

The Heart of the Matter

Dr. Sarah's Dilemma

Identifying subtle coronary inflammation in female patients is challenging. Current tools fall short.

Lucia's Concerns

Worried about heart health but lacks personalized diagnostic options. Needs tailored support.

The Solution Needed

AI-assisted solution to provide early, accurate detection and personalized insights for better heart health outcomes

Introducing VivaHeart

1 — **AI-Powered Analysis**

VivaHeart uses advanced AI to analyze CT scans, detecting subtle signs of heart disease. Compares smokers vs. Non-smokers CT scans.
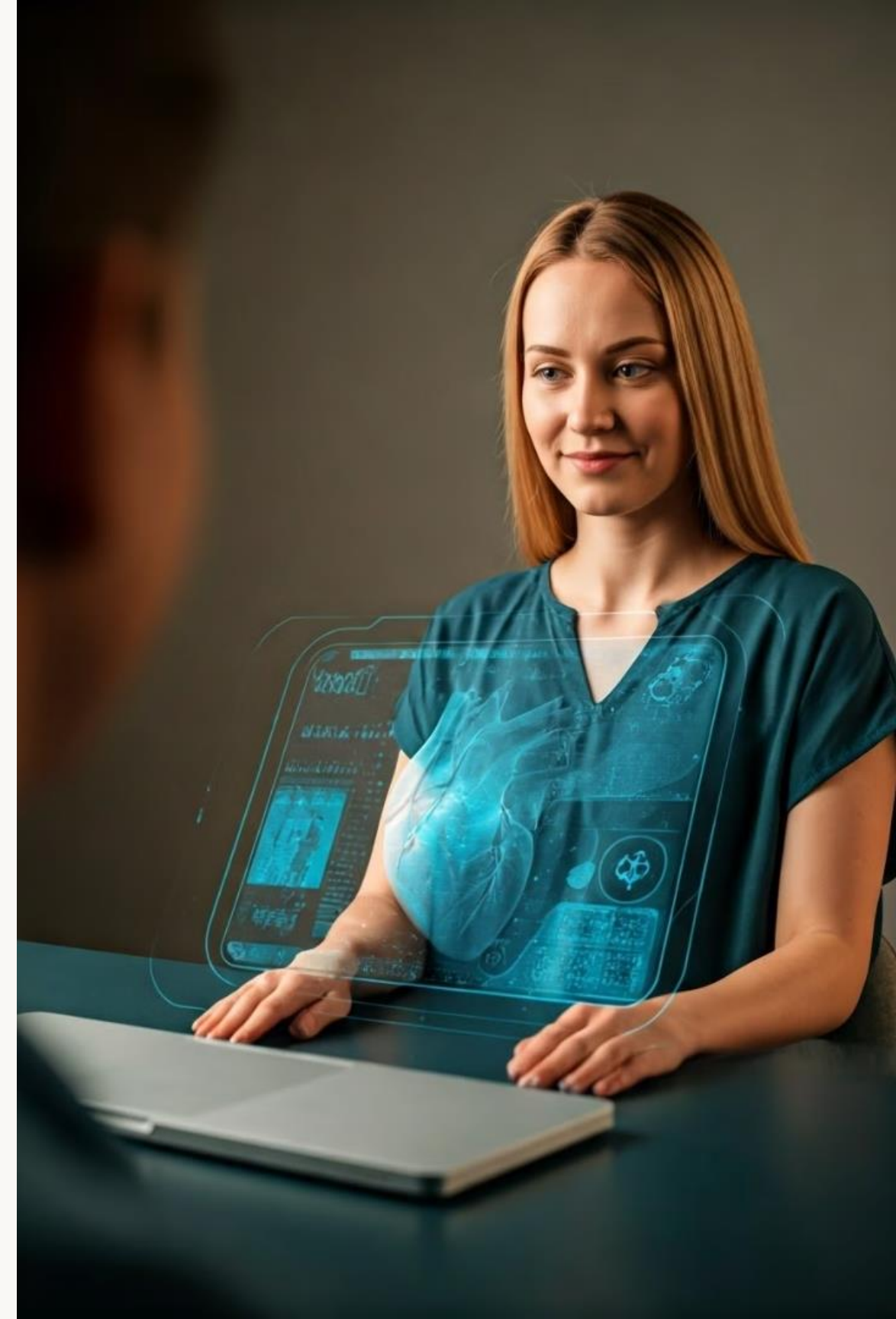
2 — **Personalized Insights**

Tailored reports, risk score and provide actionable information for both patients and healthcare providers.

3 — **Early Intervention**

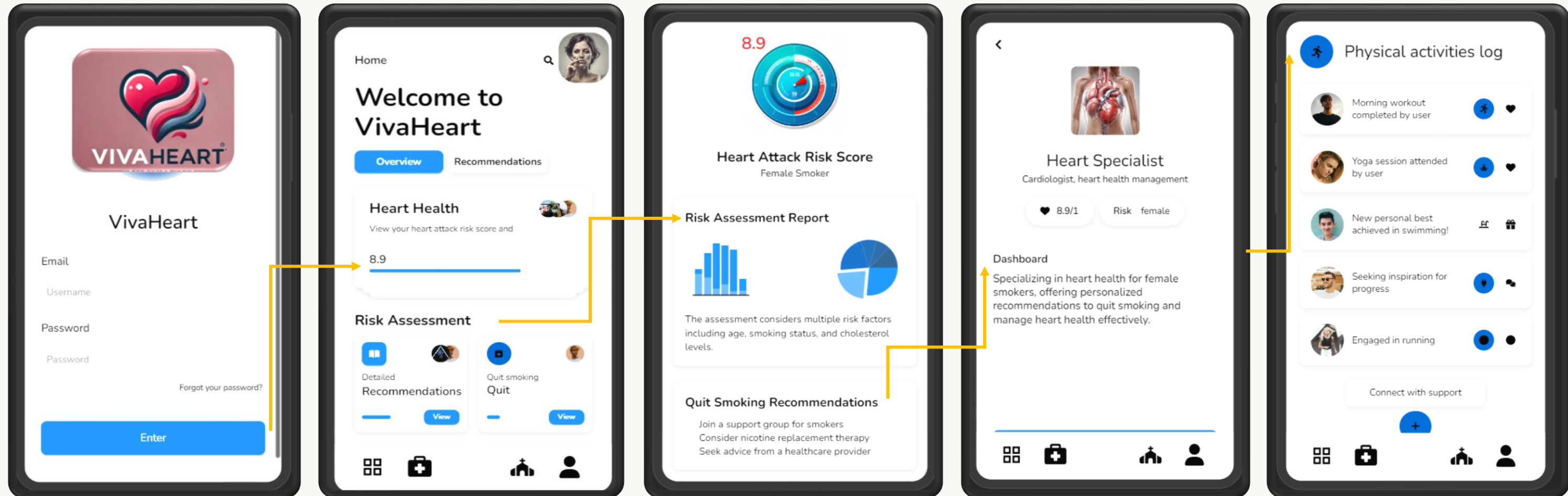Timely detection leads to earlier treatment, improving long-term heart health outcomes.

Prototype – Dr. workflow

Link

Prototype – Patient workflow

[Link](#)

Measuring Success

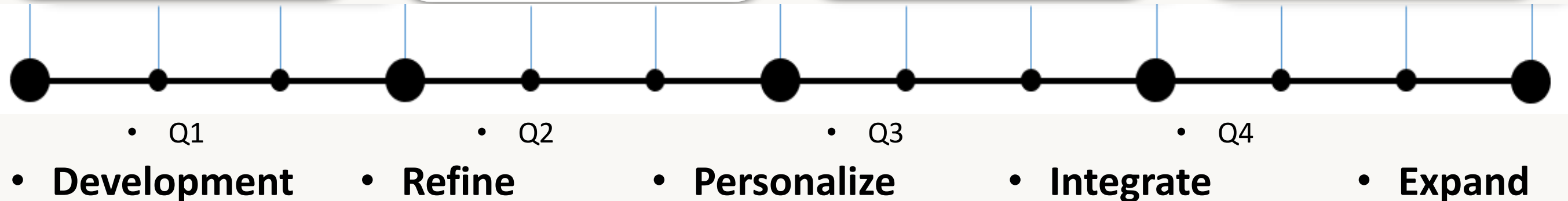| Metric	Target	Impact
Early Detection Rate	Increase by 30%	Timely interventions
Diagnostic Accuracy	Improve to 95%	Reduced misdiagnoses
Patient Satisfaction	Achieve 90%	Enhanced trust

VivaHeart Roadmap

- Research and Conceptualization
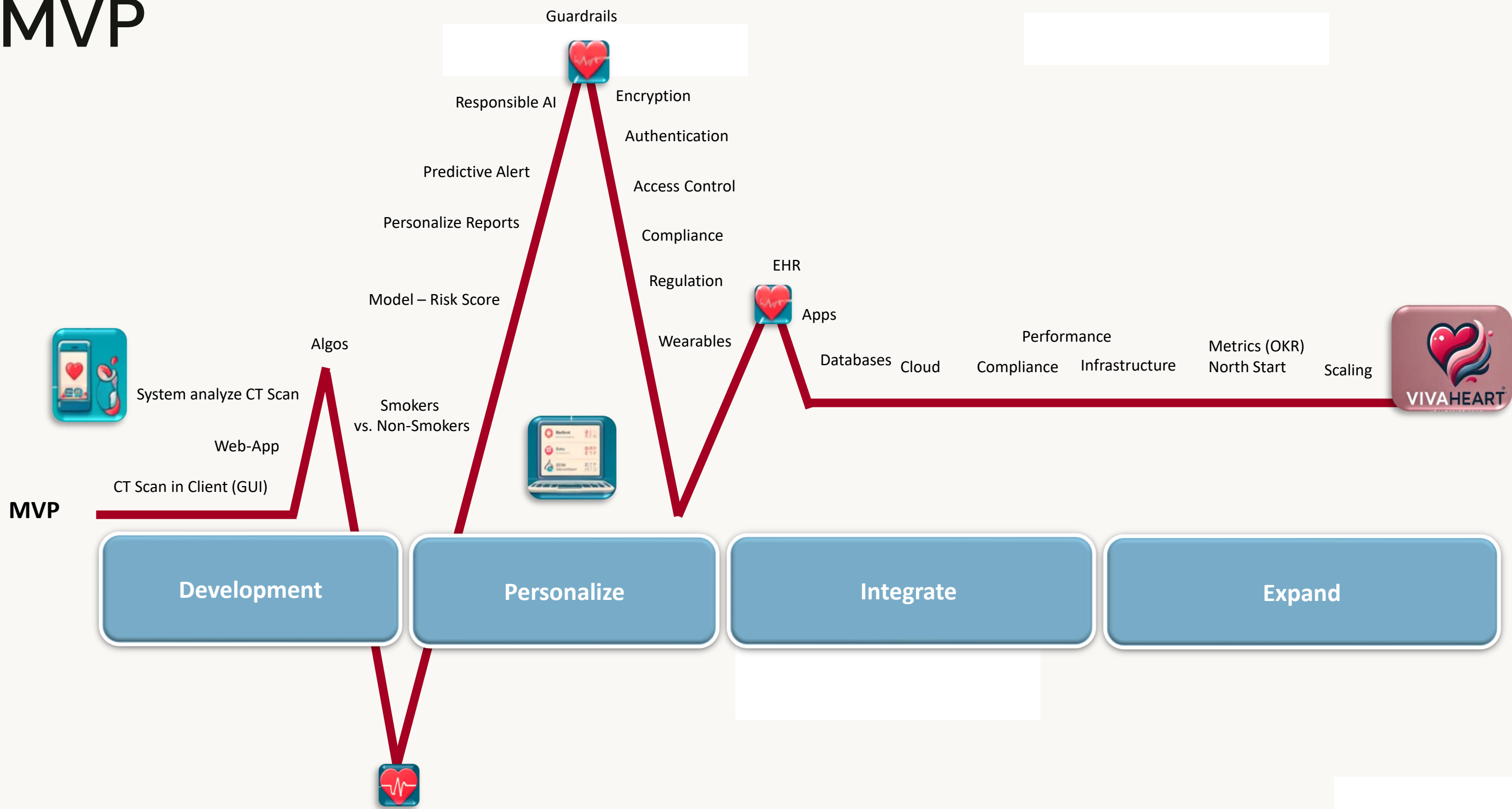- Refine Models
- MVP Development

- Clinical Validation
- User Testing and Feedback
- Model Improvement
- Enhance Experience

- Responsible AI
- Market Collaboration with clinical artifacts
- Metrics (OKR)
- Trade-Offs

- Marketing
- Launch
- Reiterate
- Global Expansion

- Q1
- Q2
- Q3
- Q4

- **Development**
- **Refine**
- **Personalize**
- **Integrate**
- **Expand**

MVP

Guardrails

Responsible AI · Encryption

Authentication

Predictive Alert

Access Control

Personalize Reports

Compliance

Model – Risk Score

Regulation

Algos

EHR

System analyze CT Scan

Apps

Wearables

Performance

Databases · Cloud · Compliance · Infrastructure

Metrics (OKR) North Start

Scaling

Web-App

Smokers vs. Non-Smokers

CT Scan in Client (GUI)

MVP

VIVAHEART

| Development | Personalize | Integrate | Expand |

Join the Heart Health Revolution

♡

Empower Yourself

Take control of your heart health with VivaHeart's personalized insights.

🩺

Transform Care

Healthcare providers, elevate your diagnostic capabilities with our AI-powered tool.

Join Our Community

Be part of a supportive network dedicated to women's heart health.

Thankyou!

Carmen Pena

AI Product Manager | Machine Learning | Deep Learning | GenAI | Driving Positive Social Change through Technology

LinkedIn
GitHub