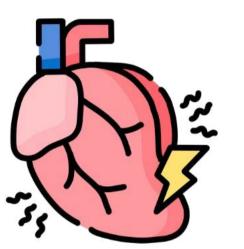


Comprehensive Alert and Response Device for Identifying Acute myocardial infarction through portable algorithmic electrocardiography

#### Mr. Sunyapat Akkarajeerawat

# PROBLEMS

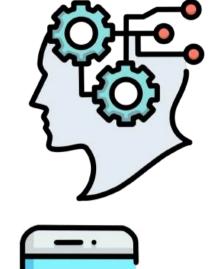


### **MYOCARDIAL INFARCTION** Globally, heart attacks leads to 16.4

million deaths per year.







### **ALGORITHMIC ECG ANALYSIS**

Artificial intelligence is employed to predict heart attacks up to 48 hours in advance.



CAREIA

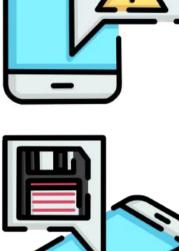


Wearable devices often miss early signals of heart attacks.



## **INACCESSIBLE HEALTHCARE**

ECG devices are often large, expensive, and restricted to hospital use.



A notification system alerts caregivers to assist in emergencies with CPR and AED guidance.



## LONG-DISTANCE MONITORING

Seamlessly collect and export detailed ECG data.

**IoT Sensors** 

6

1111



# **PROTECTION**

# **48 HOURS EARLY DETECTION**

Single-lead ECG signals are analyzed for key heart electrical signal changes.

Abnormalities will trigger an audible alarm and mobile app alert.

CARDIA Welcome, User101!

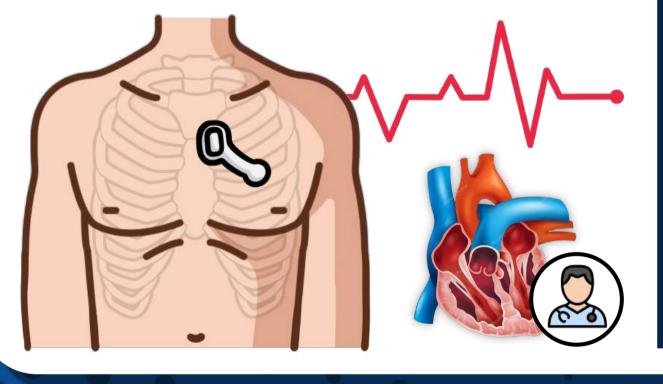
Latest Result



**Seamless Connectivity** 



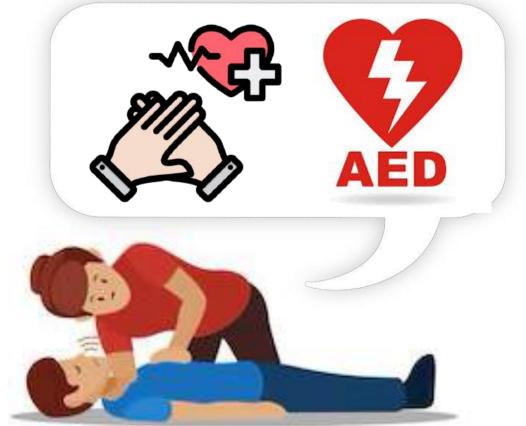
**Medically Approved Algorithm** 





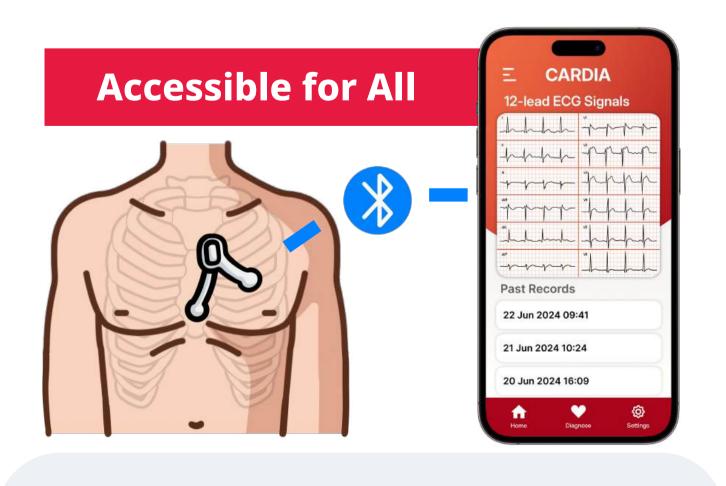
## FAST & EFFECTIVE ACTIONS

In emergencies, the system provides distress signals, CPR instructions, and **AED** location.

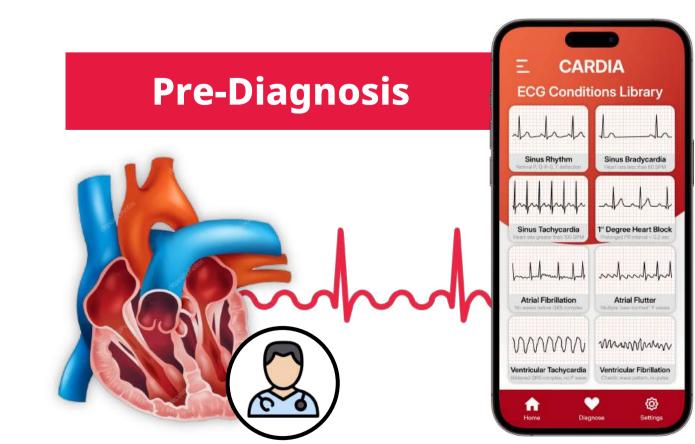




# **GOLD STANDARD METHOD**



MONITORING



Artificial intelligence classifies the ECG into 6 initial symptom groups and sends to doctor for further evaluations.



By connecting an additional electrode, the system generates simulated 12-lead ECG data readings.



#### Members

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