



# FIDES HEALTHCARE

**Disruptive Innovation to Wireless ECK**

**Novel Methodology Multi Wireless ECK Band Aides Sensor**

**Tangible benefits in terms of AI, Managing in daily life**

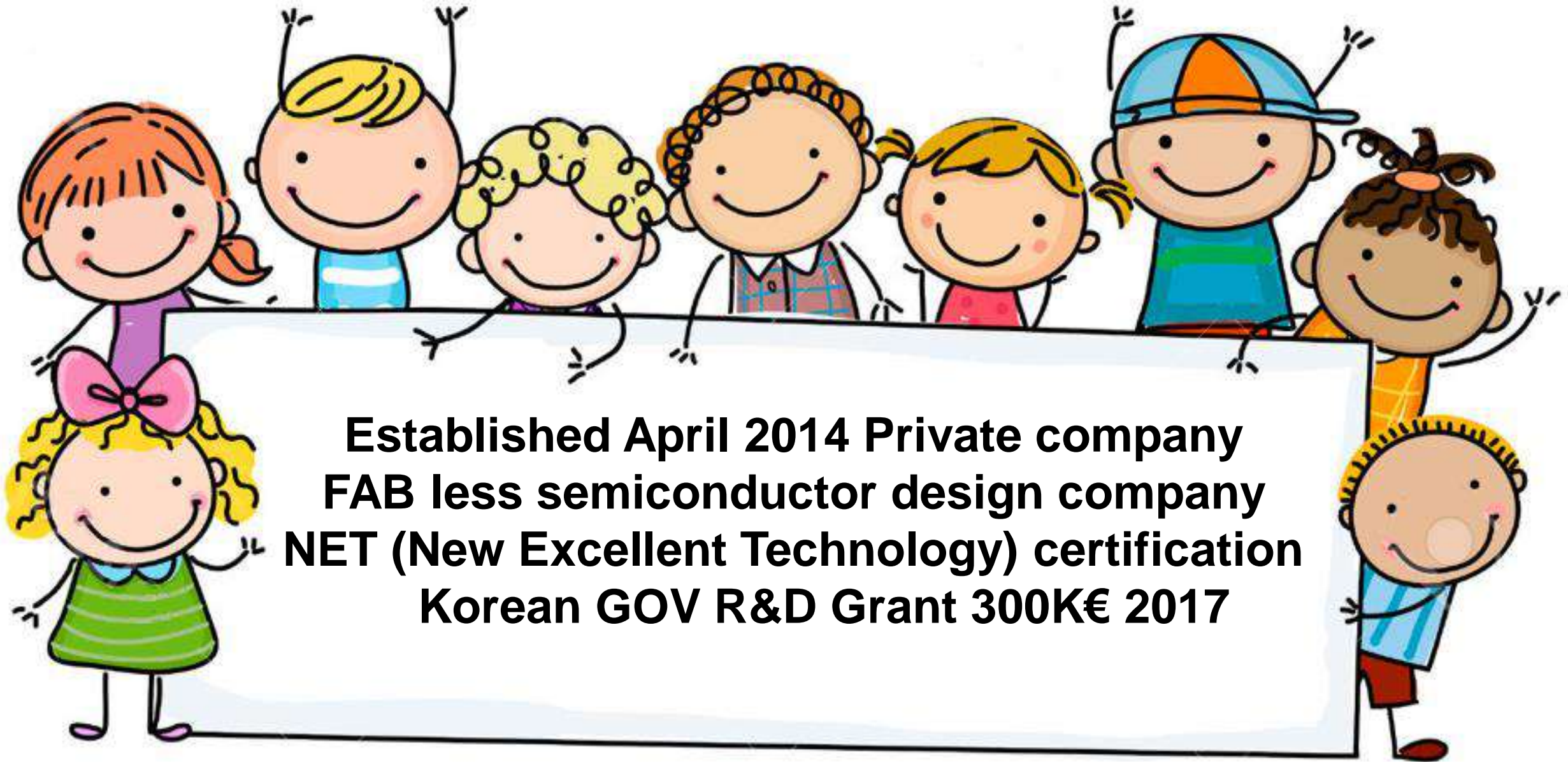


**FIDES**

[info@standbyzero.org](mailto:info@standbyzero.org)

<http://www.standbyzero.com>

# 1. Company Introduction



**Established April 2014 Private company  
FAB less semiconductor design company  
NET (New Excellent Technology) certification  
Korean GOV R&D Grant 300K€ 2017**



# Healthcare

FIDES WIRELESS ECG TAG WITH 3D MEMS BIOSENSOR



## Wireless ECG Tag and 3D MEMS Sensor

**Wireless ECG Band-Aides with body activity monitoring is indispensable in our daily life.**

**Heart pulse diagnosis with AI, Big data, wireless networks are needed in order to predict heart stress and other diagnostic body vital signs.**

**Predict heart failure events Patient Status vital sign before they happen and deterioration management.**

**The very simple wireless ECG Band-Aides make virtual ground for each sensor with small coin battery operation.**

**Physical, psychological daily life activity stress management help to well living.**

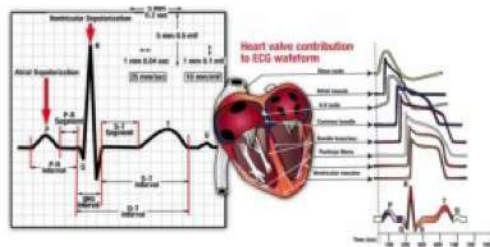
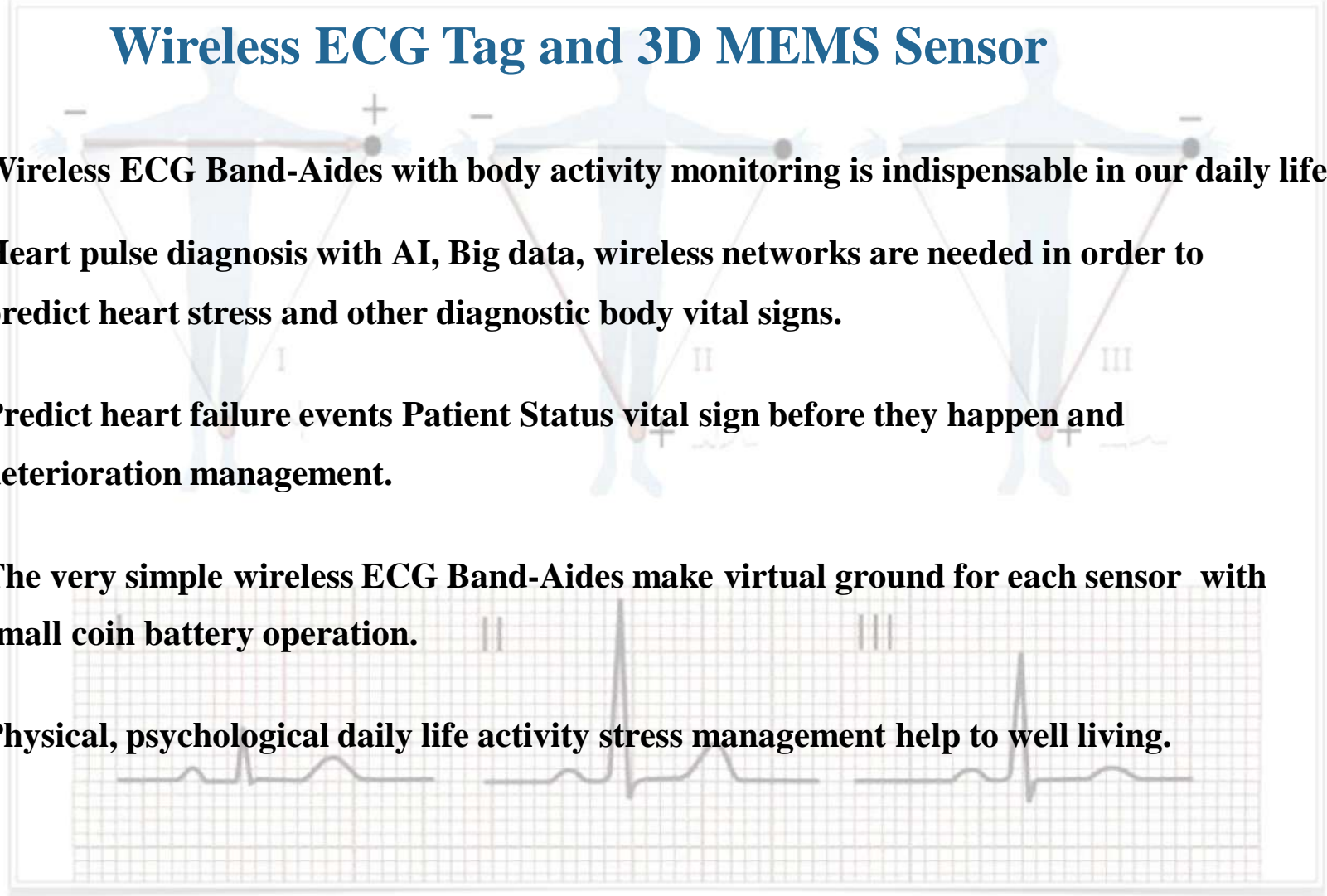


Fig 1. Heart pulse example



# FIDES ACTIVITY MEASUREMENT BY 3D MEMS SENSOR

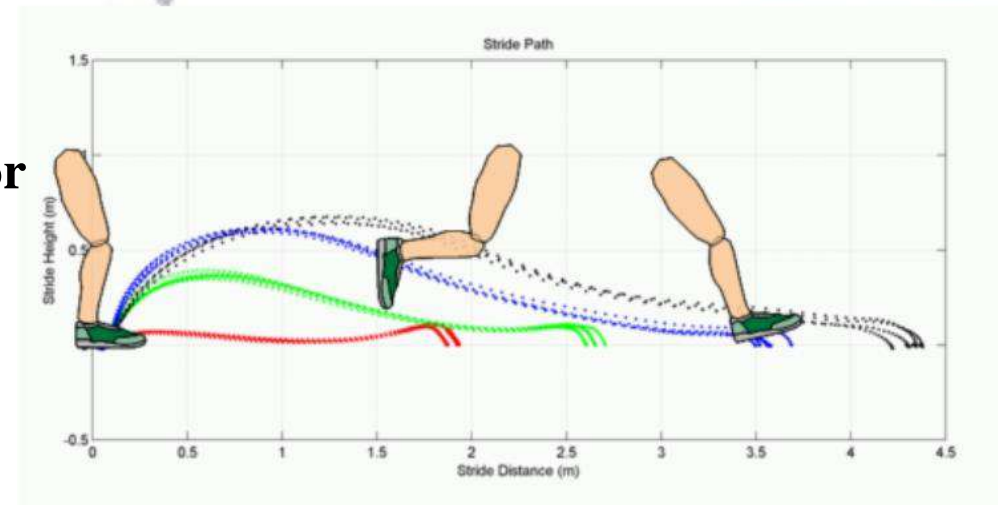


## Exercise activity classification

**The 3D MEMS sensor captures the body activity data.**

**This graph show 4 different stride for walking, jogging, running and sprinting of this person was between a walk, jog, run and sprint.**

**Inactive class for lying or sitting and active class for up and going somewhere of locomotion class.**



# FIDES TECHNOLOGY COMPARE



## Wireless Technology for ECG

Electrocardiogram quick and easy to obtain 24h heart pulse early warning high accuracy measurement are prevented sudden cardiac arrest.

Enormous benefits to millions of patients and their care teams while addressing the spiraling costs of care.



Fig 2. *FIDES novel wireless ECG coin patch* for multi purpose limb leads

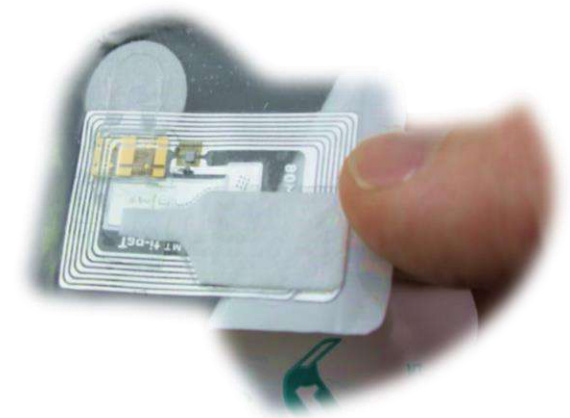


Fig 3. The future WECG will also to track blood pressure and oxygen saturation levels

---

## Ordinary Technology



Fig 4. The limb leads record by right finger touch are not support daily monitoring.



Fig 5. Wireless ECG sensor with separate transmitter and receiver.  
© Isansys Lifecare



Fig 6. Low cost compact wireless ECG sensor.  
© Isansys Lifecare

# FIDES TECHNOLOGY AND COLLABORATION



## Target research technology

- Activity heart pulse and body stress monitor
- Health monitor and managements
- Foot angle and velocity 97% accuracy for speed, distance and calorimetry with heart pulse.
- Presuppose anginal, cardiology monitor for daily life activity.
- Monitoring and AI diagnostic ECG sinus rhythm research.



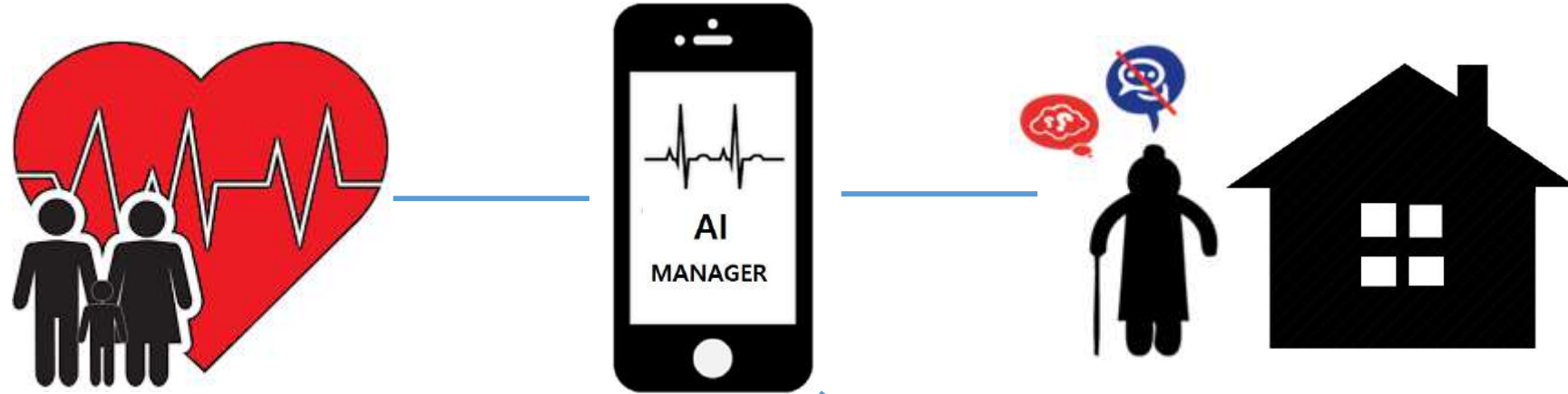
## Wireless ECK Band Aides Sensor technology collaboration

- **Ready to clinical test hospital collaboration**
- ASIC chip design, firmware
- AI Bio data analysis, diagnosis (Cardiac disease activity data)
- Various application software
- Application module production
- Certification clinic program

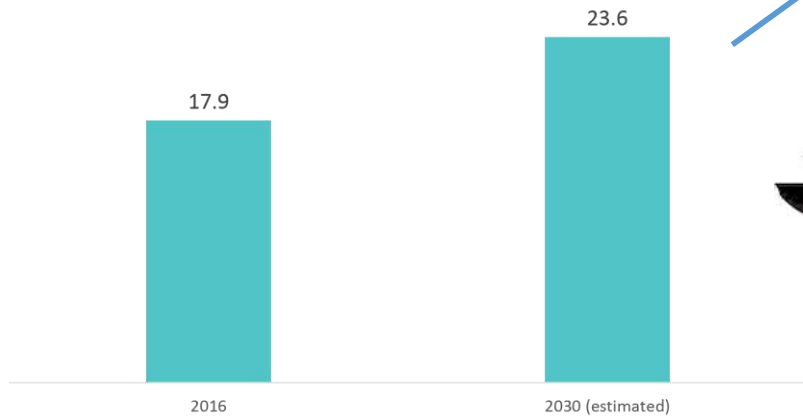
## Business with FIDES

- FIDES can provide technology with participate in ASIC, application design
- Anticipate business provide or introducing for R&D fund including invest, etc.
- To goal certificate Medical equipment AI WECG.

# FIDES TECHNOLOGY AND COLLABORATION



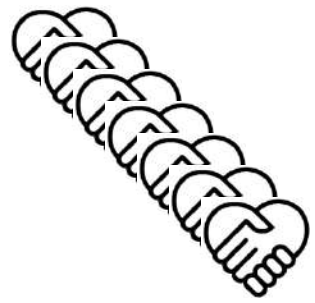
Deaths Per Year Due to Cardiovascular Diseases, in millions, Global



Source: American Heart Association, 2019



# WECG HEALTHCARE ENVIRONMENT



## Exercise activity classification

WECG / 3D MEMS sensor captures the activity data.

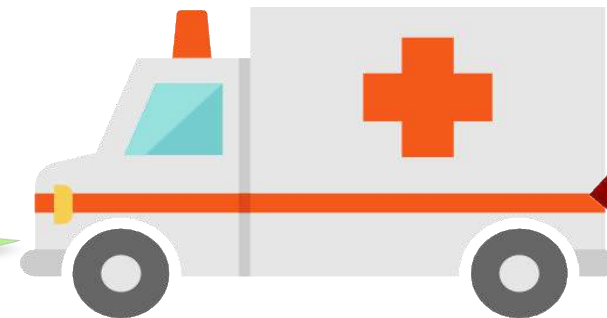
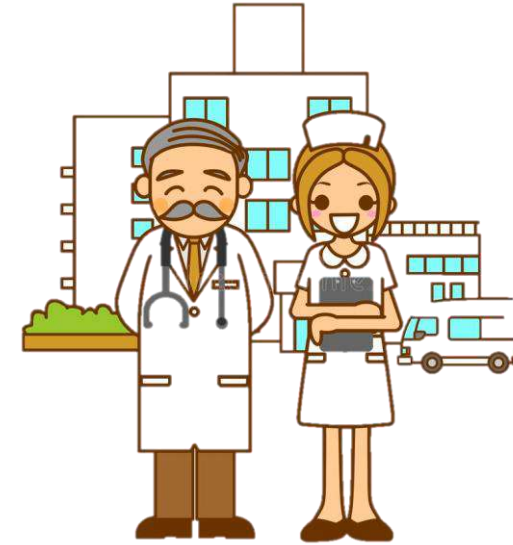
AI program support prediction / health management.



**Activity management**



**AI predict  
Vital signs**







# HEALTHCARE

