

HEALert

When Everyone Is Alert, Your Heart Is Healed.

The Problem





More than **356,000** out-of-hospital cardiac arrests annually in the U.S = **1,000** people each day













How to raise cardiac arrest survival rate?



The Solution: software integration on Apple Watch





THE STATUS QUO

Apple Watch monitors pulse



When the watch determines that a sudden cardiac arrest was experienced...

Notifies nearby CPR professionals

Interventions performed immediately before first responders arrive!



THE INNOVATION

Continuously monitors the user's pulse

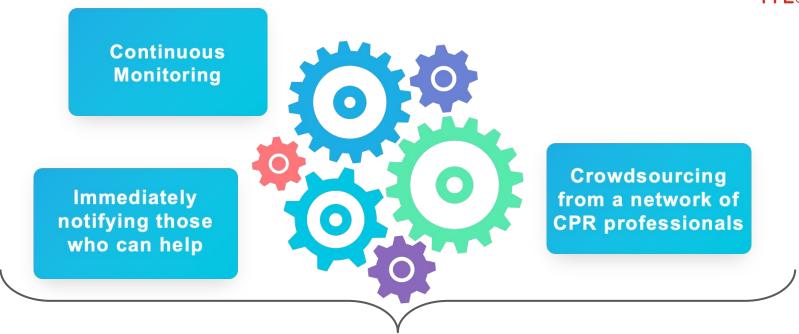
Picks up on

irregular beating rhythm, rapid fluttering, skipped beat, or no pulse at all,

vital signs to accurately detect sudden cardiac arrest

Underlying Magic





Saving cardiac arrest patients is not based on luck anymore!

Competitive Analysis



	HEALert	PulsePoint	Twiage EMS	Apple Watch Heart Rate
Detect Cardiac Arrest	~	×	×	~
Notify Helpers	~	~	~	×
Send GPS Location	~	~	~	×
Large Network	~	~	×	~
Cardiac Arrest Specific	~	×	×	×
User Friendly Design	~	×	×	~

Persona #1 - Elder at Risk, Jack Smith



Background and Demographics

- A retired worker, lives alone in LA
- High blood pressure, personal history of smoking, family history of heart disease
- Has Medicare insurance for retirees

Biggest Fears and Frustrations

- Anxious about being at high risk of severe health problems like cardiac arrest
- Feels lonely, no one nearby to reach out
- Knows little about health technology
- Doesn't want to be a burden for family
- Worried about dog if emergency happens



Daily Routine and Challenges



Goals and Expectations

- Wants a readily operated technology to get a sense of current health condition
- Builds more connection with world, so others can help when bad things happen
- Notifies daughter and grandchildren far away for any emergency situations

Persona #2 - CPR Professionals, Anna Carter



Background and Demographics

- A designer, lives with family in Boston
- Just finished a CPR training workshop from local hospital with sufficient skills and needs more experience
- Owns car, relatively flexible work time

Biggest Fears and Frustrations

- Wants to help but worried about taking the consequences for not saving patients
- Feels bad if knows one is suffering but has no chance or enough time to help
- Concerned about health of some elder family members, wants to stay connected



Daily Routine and Challenges



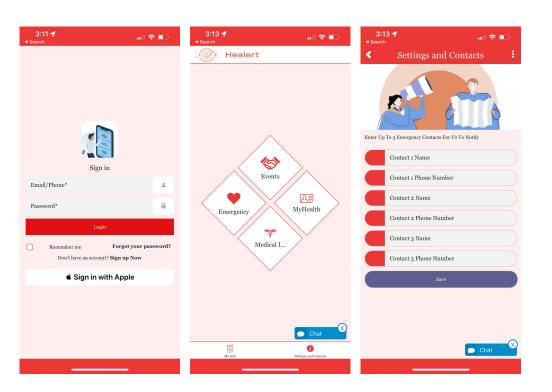
Goals and Expectations

Wants a fully designed device to accurately detect cardiac arrest with less false alarms Wants to join and help only during free time as a volunteer instead of a new formal job

Doesn't want credit for helping anyone, but also doesn't want to be punished for not successfully saving a life

How Our App Works (Demo)









MVP (Q4 2021)

Future UI/UX

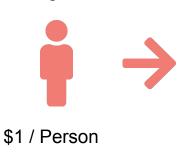
Business Model



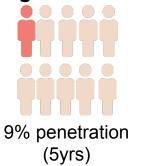
Insurance Company

We charge an *Annual Package* based on number of people in the pool





\$1/ Month





Individual User

We charge **Monthly Subscription Fees** per user





80k Revenue

80K Registered (5 yrs)

Total Market Value



Insurance Company

TAM 8.7 Billion

SAM 1.0 Billion (California)

SOM 207 Million (20%)

Individual User

TAM 92 Million

SAM 11 Million (California)

SOM 2 Million (20%)

Financial Projections



Base Case

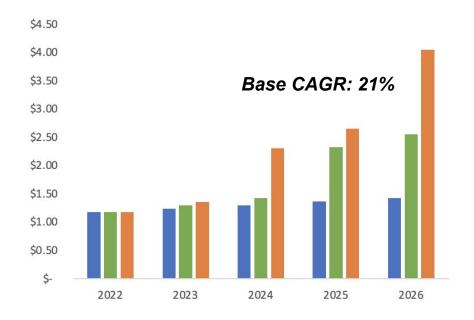
\$Million(USD)	2	2022		2023		2024		2025		2026	
Revenue	\$	1.36	\$	1.49	\$	1.64	\$	2.68	\$	2.94	
COGS	\$	0.03	\$	0.03	\$	0.03	\$	0.05	\$	0.06	
Gross Profit (Loss)	\$	1.33	\$	1.46	\$	1.61	\$	2.62	\$	2.88	
Operating Expenses	\$	0.15	\$	0.17	\$	0.18	\$	0.30	\$	0.33	
Net Income	\$	1.18	\$	1.29	\$	1.42	\$	2.32	\$	2.56	

Optimistic Sensitivity Case

\$Million(USD)	2	2022		2023		2024		2025		2026	
Gross Revenue	\$	1.36	\$	1.56	\$	2.66	\$	3.06	\$	4.66	
COGS	\$	0.03	\$	0.03	\$	0.05	\$	0.06	\$	0.09	
Gross Profit (Loss)	\$	1.33	\$	1.53	\$	2.61	\$	3.00	\$	4.57	
Operating Expenses	\$	0.15	\$	0.17	\$	0.30	\$	0.34	\$	0.52	
Net Income	\$	1.18	\$	1.35	\$	2.31	\$	2.65	\$	4.05	

Pessimistic Sensitivity Case

\$Million(USD)	2022		2023		2024		2025		2026	
Gross Revenue	\$	1.36	\$	1.42	\$	1.49	\$	1.57	\$	1.65
COGS	\$	0.03	\$	0.03	\$	0.03	\$	0.03	\$	0.03
Gross Profit (Loss)	\$	1.33	\$	1.40	\$	1.46	\$	1.54	\$	1.62
Operating Expenses	\$	0.15	\$	0.16	\$	0.17	\$	0.18	\$	0.18
Net Income	\$	1.18	\$	1.24	\$	1.30	\$	1.36	\$	1.43





Current State



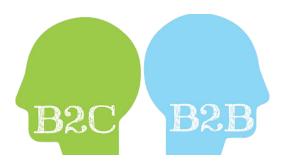
Dec 2021

01 Front-end Interface

02 Business Model

03 Go-to Market Plan





























Roadmap



Full Product

Have all the features developed and tested

Customer Acquisition

Launch full product, advertise to target people with heart diseases or health concerns

Features Update

Update with Apple Watch to improve accuracy, work on advanced features



6 mo

Q2 2022

9 mo Q3 2022



12 mo Q4 2022



24 mo

Q4 2023

36 mo

Q4 2024

Volunteer Acquisition

Promote the product in CPR training centers, first launch the volunteers features

Partner Expansion

Attract more collaborations with insurance companies and medical organizations



THANK YOU

Appendix

References

https://www.sca-aware.org/about-sudden-cardiac-arrest/latest-statistics#:~:text=There%20are%20more%20than%20356%2C000,nearly%201%2C000%20people%20each%20day.

https://www.sciencedaily.com/releases/2019/01/190131084238.htm

Registration Page

For Normal Users:

- Create user profile:
 - Request account registration (phone number, verification code, username, e-mail)
 - Allow location and enter address
 - Collect basic user info and health data:
 name, age, race, gender, citizenship, weight,
 height, past/current medical condition, surgical
 history, family medical history, social history
 (drinking, smoking, drugs), allergies, current
 medication, insurance coverage
 - Add emergency contact
 - Connect with Apple Watch

For CPR Professional Users:

- Create user profile:
 - Request account registration (phone number, verification code, username, e-mail)
 - Allow location and enter address
 - Allow notification
 - Collect basic user info: name, age, race, gender, citizenship, occupation, car owner
 - Upload CPR card for verification purposes

Product Features

For Normal Users:

- Display **usual heartbeat** on the main screen
- Users click the **start** button to begin monitoring
- Users click the end button to end monitoring
- Allows to add more emergency contact
- Any irregular heartbeat or pulse will be flagged

For CPR Professional Users:

- Display CPR steps instruction, science articles,
 and medications on the main screen
- Users click start button to begin receiving alarms
- Users click **end** button to end receiving alarms
- Display map with current GPS location and any nearby HEALert users
- Display nearby **hospitals** and contact numbers

Emergency Alert Page

For Normal Users:

- Pop-up warning for ongoing cardiac arrest
- 15 seconds countdown
 - 1. User taps to cancel alarm, return to main screen
 - No user response in 15 seconds, send messages to emergency contacts and send notifications to nearby CPR volunteers
- Timer begins to keep track of incident start time

For CPR Professional Users:

- Pop-up warning for ongoing cardiac arrest
- Receive **emergency location**, select to respond or not
 - If respond, send patient photo and name, start
 a 5 minutes countdown to ask if reach location
 within 5 minutes
 - 1. If yes, perform CPR and press **end** button when 911 arrives
 - 2. If no, return to the main screen
 - 1. If decline, return to main screen