

CPAP HELMET – LEAN CANVAS

PROBLEM

MAIN PROBLEMS

Easy spread of the coronavirus

Patient ventilation needs, since early stages

BRANCHES

Easy spread of COVID-19 in hospitals

In Italy, around 10.3% of the confirmed cases are among medical staff and in Spain 14.7%

Difficulties in self-isolation during COVID-19;

Feelings of anxiety and loneliness and large families quarantining, with infected familiars, in small places with no conditions for a safe isolation;

Few and expensive PPE and ventilators;

In risk areas in the UK, over 45% of doctors reported shortages of full-face visors and long-sleeved disposable gowns and 14% reported no supply at all of disposable goggles. Also, for example, Russia only possesses around 100 ventilators and has about 60 000 confirmed cases.

Response in developing countries;

There are more 25 million displaced refugees globally, many living developing countries in risk for COVID-19 with limited resources and weak health care systems.

There are no more than 80 ventilators in Sudan and just 3 ventilators available in the Central African Republic, a country of almost 5 million people.

SOLUTION

CPAP HELMET + MOBILE APP

Low Cost, comfortable, portable and scalable;

Facilitates respiration and avoids the spread of the virus;

Easy monitoring of the device through a mobile App that also provides relevant data regarding the patient health state;

Possibility of upgrade into a BiPAP;

Adaptable regarding the cost needs.

MISSION

WE WANT TO:

Minimize the spread of the corona virus in hospitals environments;

Reduce the need of ventilators, allowing a pre-ventilator treatment;

Minimize the risk of contamination, facilitating quarantine and isolation;

Provide low cost a device, also adaptable to be used in developing countries and critical situations.

EXISTING ALTERNATIVES

Non-portable and more expensive CPAP helmets, for instance, the StarMed CaStar hood solution;

Decathlon Easy Breath surface using snorkeling mask. It is cheaper but does not provide the same respiratory assistance or monitoring and it is not comfortable, causing skin irritation, a situation verified in many alternatives.

COSTUMER SEGMENTS

Hospitals;

NGOs;

Patients with confirmed COVID-19 that don't need to stay in the hospital but need self-isolation;

People waiting for COVID-19 tests results at home or other potential infected people;

People that live with risk group individuals and that are a possible infection source;

EARLIER ADOPTERS

Hospitals and Organizations collaborating with the EU;

Other institutions that might collaborate with us.

CHANNELS

Hospitals – proving the helmet to patients in need;

Pharmacies – selling the helmet to private individuals;

Private hospitals – giving the helmet to patients in need and/or selling it to private individuals.

COST STRUCTURE

Basic Structure ~175€

Adding ECG measure ~ 25€ (optional)

Total: 1 device ~ 200€

We estimate that for 1000 units we can get ~ 180€/unit (Estimations based on the known aprox. cost of 1 unit)

REVENUE STREAMS

Crowdfunding;

Raising funders / supporters, contacting hospitals, EU, authorities (health sanitation and ministry) and others.

Using the income of sales to finance the project.

UNIQUE VALUE PROPOSITION

B2B - HOSPITALS AND NGOs

Minimising spread of the virus in the hospitals

Helping in breathing, minimizing the need of ventilators;

Easy monitoring of patients;

Low cost

B2C - COSTUMER

Facilitates isolation, allowing a better quarantine at home ;

Portable, comfortable and easy use, without medical help;

Low cost;

Easy monitoring of the device and health symptoms.

CURRENT LIMITATIONS / NEEDS

More tests, gathering all components;

CO₂ retention test;

Legal advice for patent registration;

Financing and support.

KEY METRICS

Funders and supporters;
Hospitals using our device;
Individuals buying our device;
Devices needing repairment;
Users / hospitals buying again;
Income.