

Wireless Sensor Platform For Home-Based Healthcare

Crete, Greece
Heraklion, Greece
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Project Stage:

Idea

Budget:

\$10,000 - \$50,000

 [SHARE](#)

- [Medical Research](#)
- [Child care](#)
- [Health care](#)
- [Information & communication technology](#)

Project Summary

Elevator Pitch

Concise Summary: Help us pitch this solution! Provide an explanation within 3-4 short sentences.

A multifunctional portable platform for measuring biomedical data with fully autonomy usage from the patient, for housing or for distance medical care. The usage of the platform will be functioned from the patient without the need or the presence of a doctor, medical staff for measuring/receiving data

About Project

Problem: What problem is this project trying to address?

A big percentage of the Greek citizens are over aged people, where they always need medical observation. At the same time there are patients with long-life diseases and sicknesses with some needs (cancer, diabetes, heart strokes, hypertensive individuals, e.t.c). Especially in places far from hospitals or medical care. The same also happens sometimes in Big cities, where the lack of medical and nursing staff is huge.

Solution: What is the proposed solution? Please be specific!

The aim of the project, is the collection and elaboration from biometric measurements of patients in Real Time and the briefing of patient and doctor. The interest of this solution is focusing on housing medical care to come up against of medical incidents and also of direct and faster transport and store of medical information. The platform will contain a system managing and collecting all the medical needed information with a big number of applications. With the usage of new technologies we will be able to inform immediately the patient, the nursing unit and the responsible doctor through network or SMS. The system that will be developed will be compatible with FHIR.

Impact: How does it Work

Example: Walk us through a specific example(s) of how this solution makes a difference; include its primary activities.

Health is the ultimate possession human can have. With this system we will be able to make a timely diagnosis using the specific platform and to avoid any bad or dangerous facts. A simple example is a patient that has heart problems in some small island: The time before visiting a hospital is very important cause the deaths at that point is big, and until now there is no reduce on that. With that platform we can have the needed result. For each patient-user of the platform, at some point where there will be some health problem, through the system the doctor will be informed automatically and he will take the appropriate measures. For each patient-user of the platform there will be analytical history in the central computer system.

Impact: What is the impact of the work to date? Also describe the projected future impact for the coming years.

The first reason of deaths globally are the cardiovascular diseases, mostly because of the patient not following the required treatment. With the platform we can follow and observe the overall situation and health of the patient, and where is possible if the patient is following the treatment. The main target of the project is the distance observation of patient's health. With the platform the geographical distance is no longer a problem for immediate medical service. Overall the advantages are that everyone, no matter if they are far away or close to hospitals, have equal rights to health services and they also can have upgraded health services. So with that we are encountering a problem of organizing in medical units/centers.

Sustainability

Financial Sustainability Plan: What is this solution’s plan to ensure financial sustainability?

This solution is already in implementing and testing stage. When this step is done, what is going to start is to try and promoted to the medical industry. We believe that the combination of cheap hardware with the needed specialized management system, storing and checking (client application-server) all in a package will find some correspondence in the market.

Marketplace: Who else is addressing the problem outlined here? How does the proposed project differ from these approaches?

In the market there is not something similar with that and if there are, there are very expensive and they don't cover all the requirements needed. The usage of microprocessors Arduino allows the implementation of such a system for collection and exchange biometric data with a cheap and reliable way. For example, for the systems that are already in the market usually they are not so much direct in the measurements, some basic sensors are missing and there is not some history record for the patient in some site, or application.

Team

Team

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About You

About You

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Twitter URL

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About Your Project

Organization Name

How long has your organization been operating?

Project

Organization Country

, Heraklion

Country where this project is creating social impact

, Crete

What awards or honors has the project received?

Funding: How is your project financially supported?

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Supplemental

Partnerships: Tell us about your partnerships.

Source URL: <https://www.changemakers.com/destinationchange/entries/wireless-sensor-platform-home-based-healthcare>