Universidad de Alcalá

TCARE ROBOTIC SOLUTIONS FOR TELECARE

TECHNOLOGY OFFER

Code

TIC_UAH_16

Application areas

- Information and Communication Technologies

Type of collaboration

- Interested in companies or institutions to conform a consortium for a project proposal to make it the system real
- Manufacturating Agreement
- Services Agreement

Main researches

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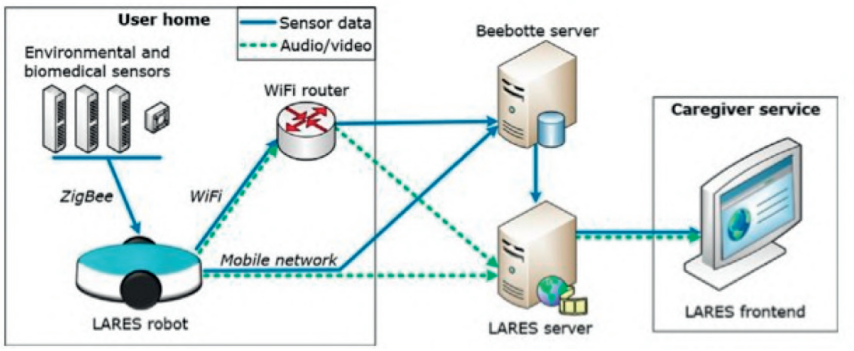

ABSTRACT

We propose a set of innovative tools for companies of telecare and medical assistance. These tools consist of three parts to achieve three objectives:

- Implement telepresence in patients' homes. With telepresence, caregivers can quickly contact with patients which means a significant reductions in travel expenses.
- Provide real-time alerts on the status of patients.
- Elaborate medical reports on the behavior of patients.

The three parts of the system are:

- An autonomous and telecontrolled robot that implements radio telepresence.
- A network of sensors to monitor the patient unobtrusively thus achieving the acquisition of important variables on the patient..

A web platform that allows caregivers to manage the system. By intelligence artificial, the web platform provides alarms and medical reports. In addition, caregivers can control the telepresence robot therefrom.

ADVANTAGES AND INNOVATIONS

So far, the solutions offered to dependent people consist of an emergency necklace button or an emergency phone button (with or without GPS). Both are active systems where the patient has an important role.
Our system presents a new alarm management for the benefit of patients and caregivers allowing a better market positioning, scalability in health care environments and reducing travel expenses.

- A new level of telecare 3.0 that implements e- health and telepresence databases.
- A robotic solution that implements telepresence
- A web platform as a tool for caregivers
- A passive rol of the patient in using the system
- An effective management of potential patient falls and alarms by monitoring with a sensor network WSN.