FREQUENTLY ASKED QUESTIONS

The Project

Who is financing the project?

CARESSES has received 2,084,248.75 EUR from the European Commission and 60,000,000 JPY from the Ministry of Internal Affairs and Communications of Japan.

What is the project aim?

CARESSES is a project designed to create the first elder-care robots able to adapt to people's cultural identity.

What fields of research are involved in the CARESSES project?

Developing a project like CARESSES requires expertise in scientific fields that are not typically interrelated, such as robotics (software programming, artificial intelligence, motor control and perception) and elder care, specifically what is known as transcultural care.

Is CARESSES a software or hardware project?

The main aim of CARESSES is to develop a system of artificial intelligence that allows elder-care robots to take people's cultural characteristics into account. The project centers around software but some aspects involve hardware such as adapting software developed for a specific robot and integrating sensors and other devices that will allow the robots to better understand their environment and the people they interact with.

So CARESSES does not "build" robots from square one?

No, CARESSES uses existing robots. One example is the Pepper humanoid robots from SoftBank Robotics, a project partner. They will be able to learn and modify their behavior and actions based on the cultural identity of the people they care for.

Is CARESSES conceived only for Pepper robots?

No. Pepper robots are used in the project but the development methodology and the software can be adapted to other platforms. This is one reason why the program codes will be released with an open source license.

The Robots

What does an elder-care robot that adapts to the culture of the person it assists do?

The robots will be able to communicate with people and learn about them by taking into account their cultural identity and individual characteristics. They will be able to remind the people to follow the therapy prescribed to them, encourage them to have an active lifestyle, help them stay in touch with family and friends, suggest appropriate clothing for specific occasions, help decide on a menu for guests and also remind people of upcoming anniversaries or religious holidays.

Can CARESSES robots provide physical care?

Only basic tasks such as bringing someone objects in a basket, for example. Among the interactions they are planned to do with people, there are none that a human care giver would do such as lifting people, laying them in bed or helping them to walk.

So, CARESSES robots don't replace human care givers?

Exactly, CARESSES robots are complementary to care home workers. They do not replace them, but they help make the lives of the people they assist less lonely and they make it less urgent for care home workers to be near.

What need is there for this type of robot?

In the most immediate sense, they should make the lives of the people they assist easier. On a societal scale, they should alleviate the growing pressure on health institutions due to the progressively ageing population and facilitate home care.

Isn't there a risk that the robots might adopt a stereotyped view of the people they assist and their culture?

CARESSES is based on studies on the importance of attention to cultural identity in health care conducted by Irena Papadopoulos, a project partner. The artificial intelligence programs developed in the project will allow the robots to fine tune their knowledge by adapting it to the individual characteristics of the people they take care of. The risk of falling into a stereotype is minimized by the solid scientific base the project rests on and the robots' abilities to know if and to what degree the person they take care of conforms to the general traits of the cultural group. They then model their behavior accordingly.

How will you evaluate whether CARESSES robots have a positive effect on the lives of the people they assist?
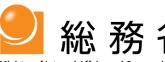
CARESSES robots will be tested at the Advinia Health Care homes in the UK and the HISUISUI home in Japan. They will be evaluated by care workers and the older people themselves. During the testing phase, some residents of the care homes will be divided into two study groups. The first (10 people in care homes in the UK and 5 in Japan) will receive care from non-culturally competent robots while the other group with the same demographic (10 people in care homes in the UK and 5 in Japan) will interact with culturally competent robots.

I would like to see CARESSES robots in action. Is it possible?

You can contact the project at the address media@caressesrobot.org indicating your request and we will try to arrange a meeting. However, please take into consideration that Caresses is an international project and the robots will be located in different countries during different phases of the projects. Also, please notice that the robots will be able to fully perform as culturally competent elder care robots only at the end of the project, in 2020. Before that date, the robots will display different capabilities in the various phases of the advancement of the project.

The Culture

What is transcultural care?

It is assistance that differs based on the cultural characteristics of the person receiving the care. CARESSES is the first robotics project applied to elder care with the aim of developing culturally competent robots.

Why is transcultural care important?

As shown in numerous studies, awareness of cultural identity is important for a satisfying relationship between care giver and client as well as for improving the quality of care practices.

What is "cultural competence" exactly?

By "cultural competence" we mean a robot's ability to recognize a person's set of cultural characteristics, be they general or individual. The robots will be aware of the person they assist's age, education level, family structure, religious beliefs and personal knowledge (*cultural awareness*). The robots will know the older people's values, convictions and positions on health and illness, and how they take care of themselves (*cultural knowledge*). Finally, the robots will become sensitive to the personality of the people they assist, to the way they speak, with their pauses, inflections, accent and intonations, to their ability to relate to and communicate with others, and to trust and empathize with others (*cultural sensibility*).

What cultures will the robots become competent in?

The cultures represented in the CARESSES experiments are: British, English-speaking Hindu Indian, English-speaking Muslim Indian and Japanese.

Why were these specific cultures chosen?

The cultures the robots will be competent in were chosen based on two things. The first is the need to conduct the experiments with people from different cultures who are also geographically distant. The other is the need to find people from these cultures who reside in the care homes participating in the project.

What about other cultures?

Even though the CARESSES experiments will be carried out with people from these four cultures, the general goal is to develop a system where robots will be able to adapt to any culture.