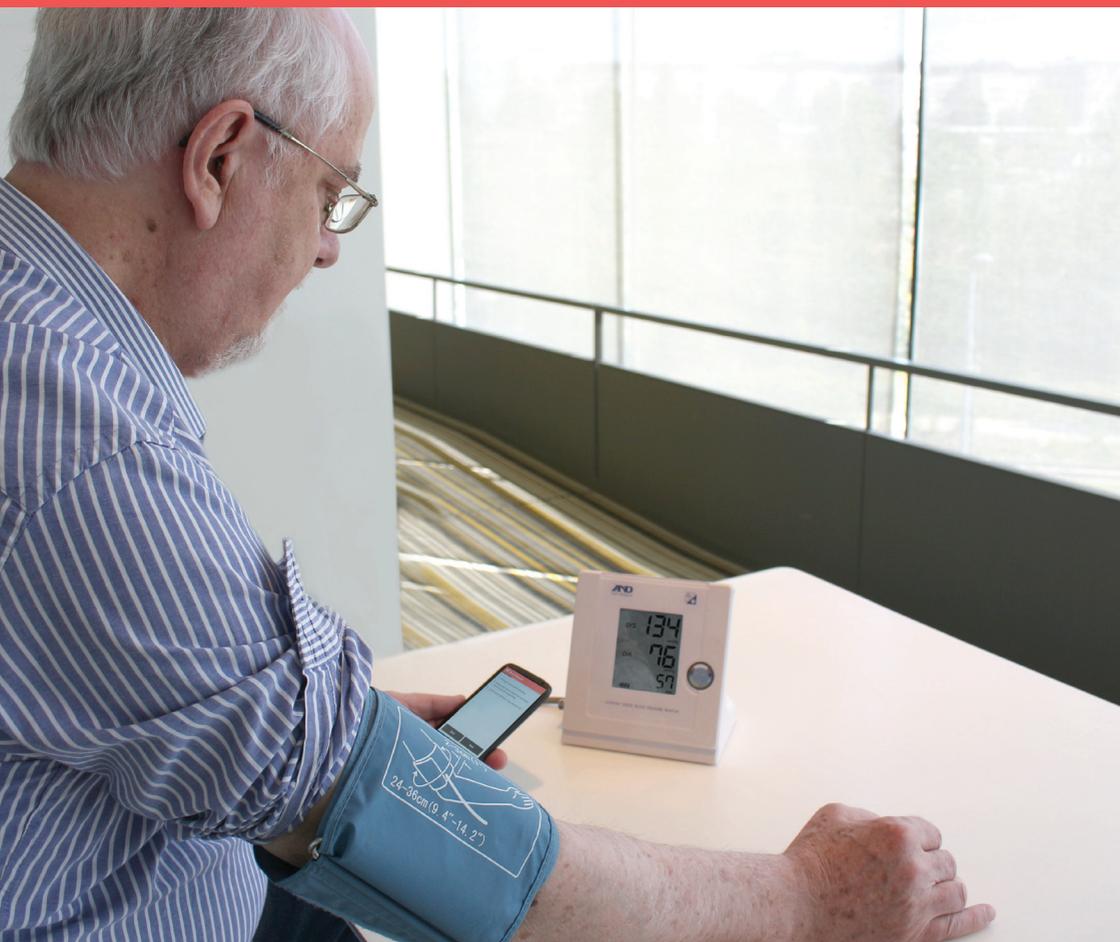
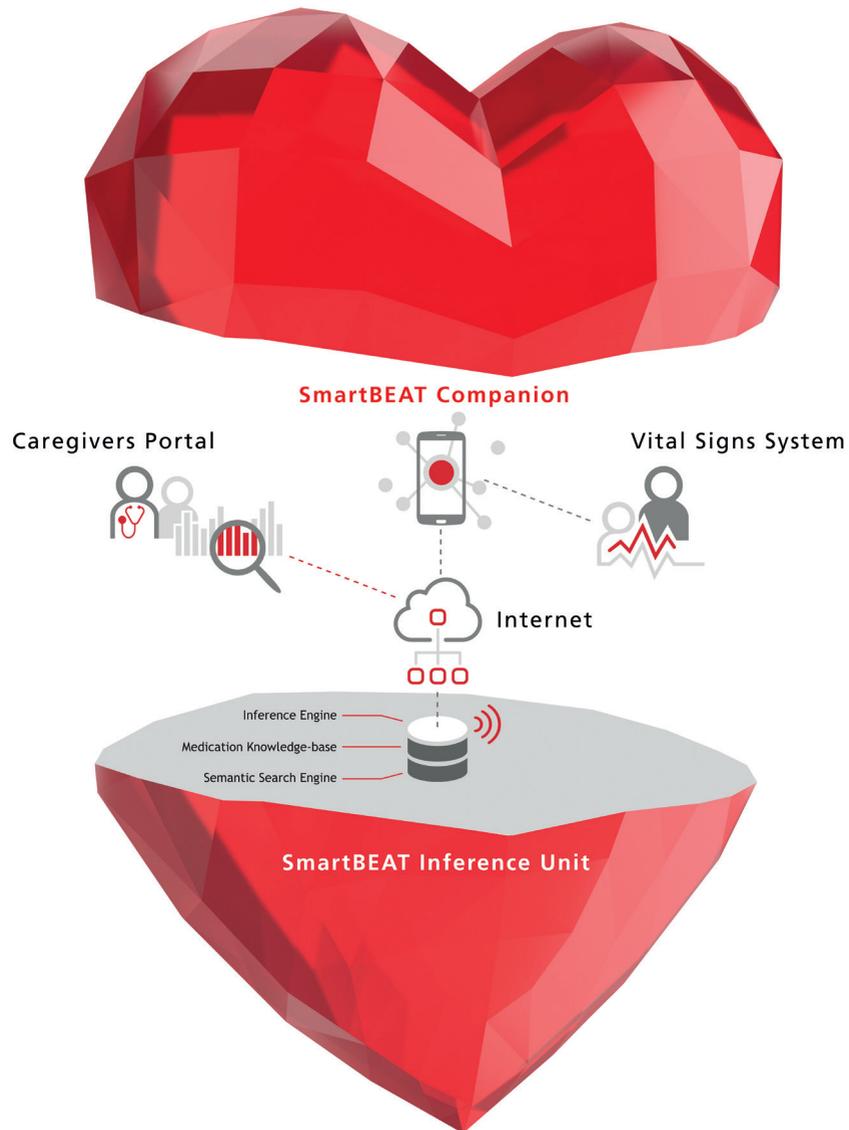


SMART SYSTEM FOR THE MANAGEMENT OF HEART FAILURE IN OLDER ADULTS

SMARTBEAT



THE PROJECT FOCUSES ON DEVELOPING USEFUL AND REALISTIC SERVICES THAT REDUCE THE NEED FOR HOSPITAL ADMISSIONS AND INSTITUTIONAL CARE, AND ENCOURAGES EARLY DISCHARGE.



Objectives

The SmartBEAT solution will be a mobile Heart Failure (HF) telemonitoring kit, which uses communication technologies and sensing devices to remotely monitor several clinical variables of HF patients considered essential by expert cardiologists, such as physical activity levels, weight, blood pressure, pulmonary congestion (identification of crackles), heart rate and rhythm, and therapeutic compliance. The main aim is to create a user centred, integrated mobile solution to leverage patient self-care.

Another focus of this project is to include support applications for the communication between the patients and both their formal and informal carers.

A system intelligence component will be capable of an overall approach, where patients and caregivers can define their interests and receive valuable information from several information resources.

The Vital Signs System (VSS)

Encompasses the devices required for acquiring the user's physiologic data and securely deliver it to the correct endpoint.

The SmartBEAT Companion (SBC)

Provides a bridge between the VSS and the remaining components, and acts as a gateway and primary user interface for the patients.

The SmartBEAT Inference Unit (MIU)

It is responsible for storing and processing the data obtained with the VSS component – this component contains the system intelligence.

The Caregivers Portal (CGP)

It is a web application serving as the front-end for the formal and informal caregivers, each with different access permissions.

