

# **TETRACOM: Technology Transfer in Computing Systems**



FP7 Coordination and Support Action to fund 50 technology transfer projects (TTP) in computing systems. This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no 609491.

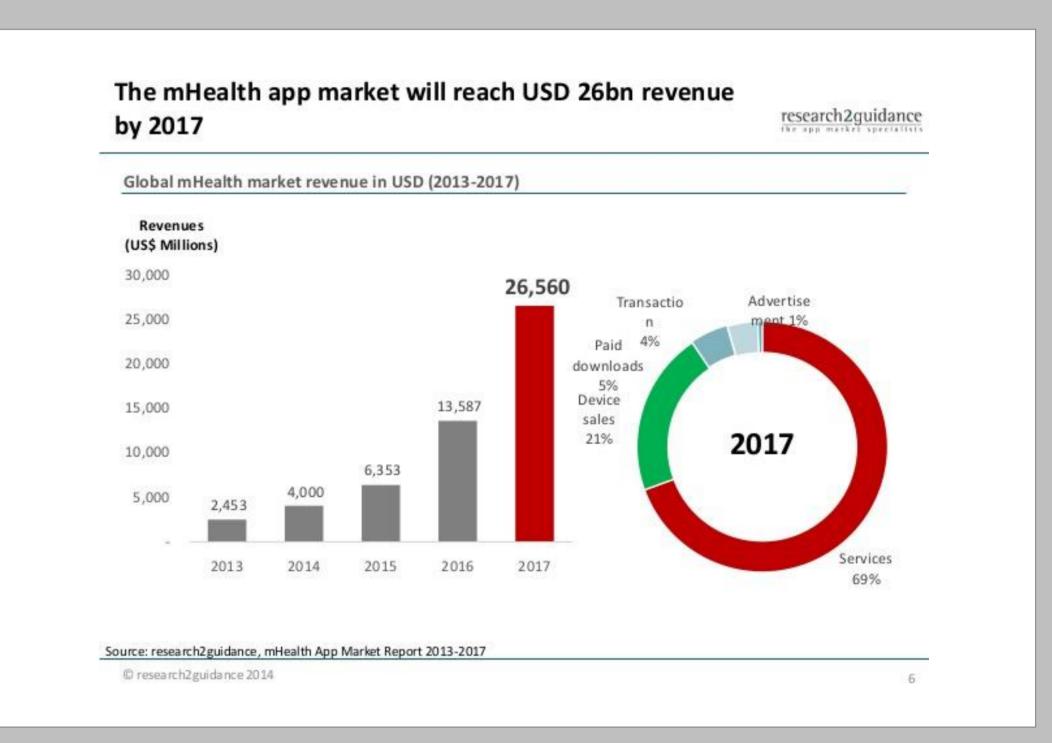
# Wearable Multifunctional Body Sensor (MedSens)

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#### **TTP Problem**

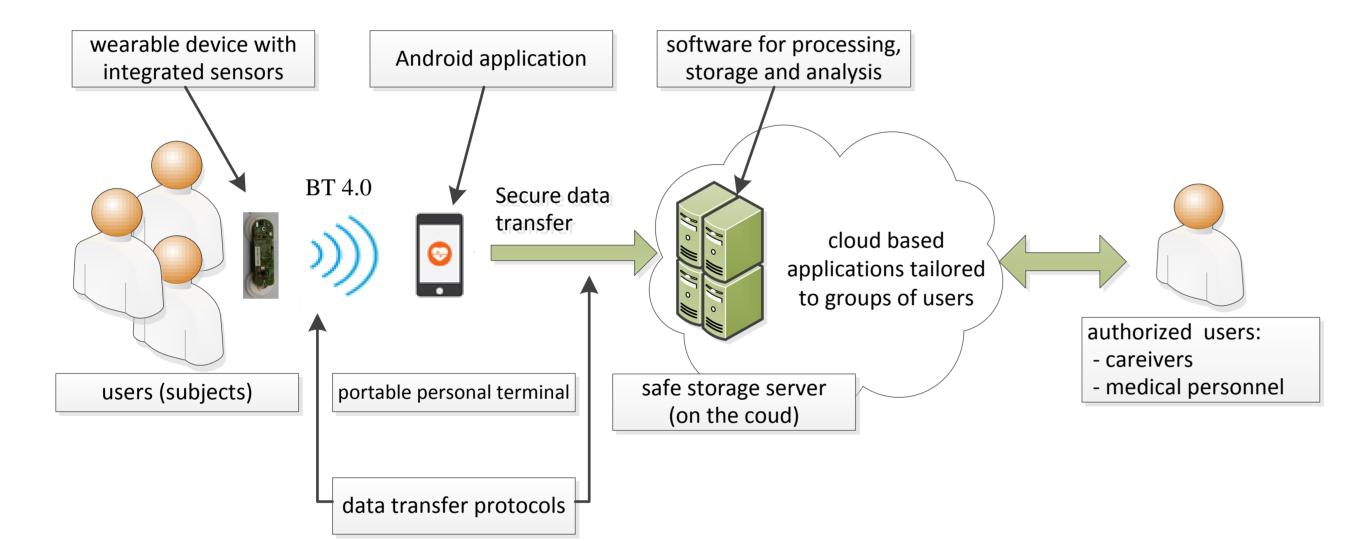
- 1. Lack of widely accepted mHealth solutions that can provide improved medical care with reduced costs. Weakness of current solutions - majority of attention is focused on the technology.
- 2. Acceptance of mHealth solutions can greatly be increased by an extensive involvement of users and their caregivers.
- 3. High added value and great market potential of mHealth products, services and networks.

The developed system must be CE certified as a medical device, before commercialization, which represents a significant effort in terms of investment and human resources.

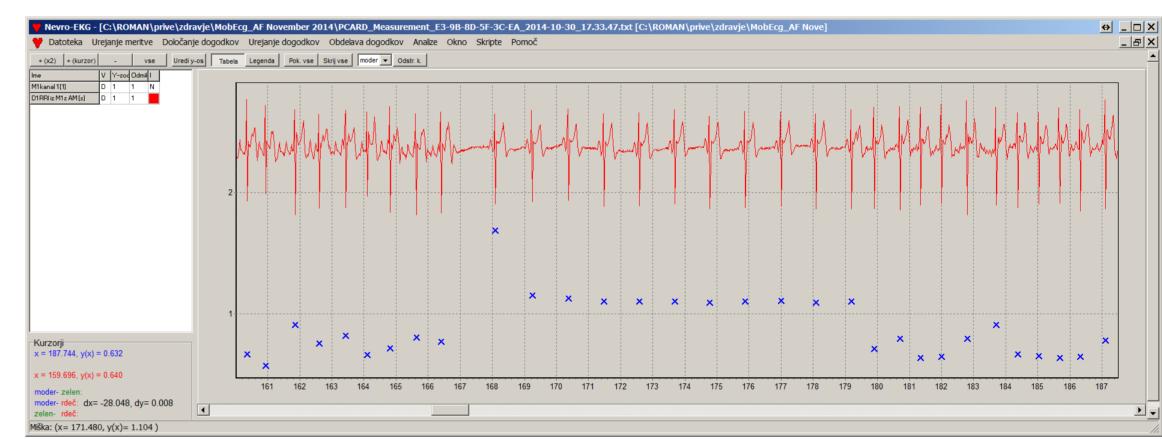


#### **TTP Solution**

#### **Technology platform for follow-up of patients**



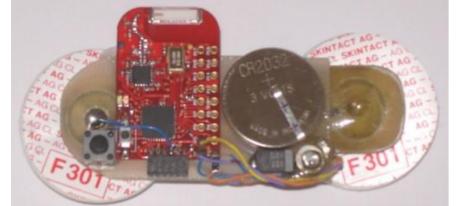
# Personal computer software for processing & analysis

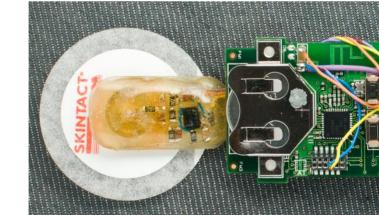


- Measured ECG channel (red curve) & detected individual heart beats (blue x-es)
- The example shows atrial fibrillation

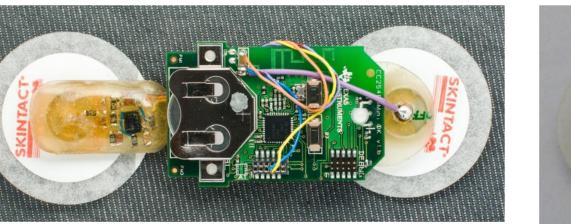
### WIRELESS BODY SENSOR EVOLUTION

2009 2012 2014 2015 2016 Year

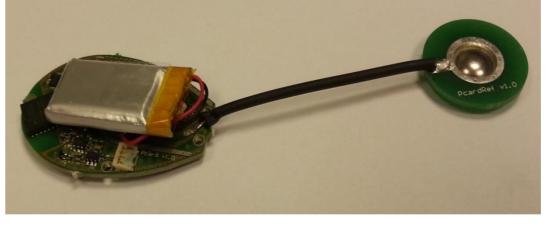




Measures ECG









- New flexible design Final product with casing → lightweight, unobtrusive, low cost ← —

2.4 GHz radio SimpliciTI wireless protocol

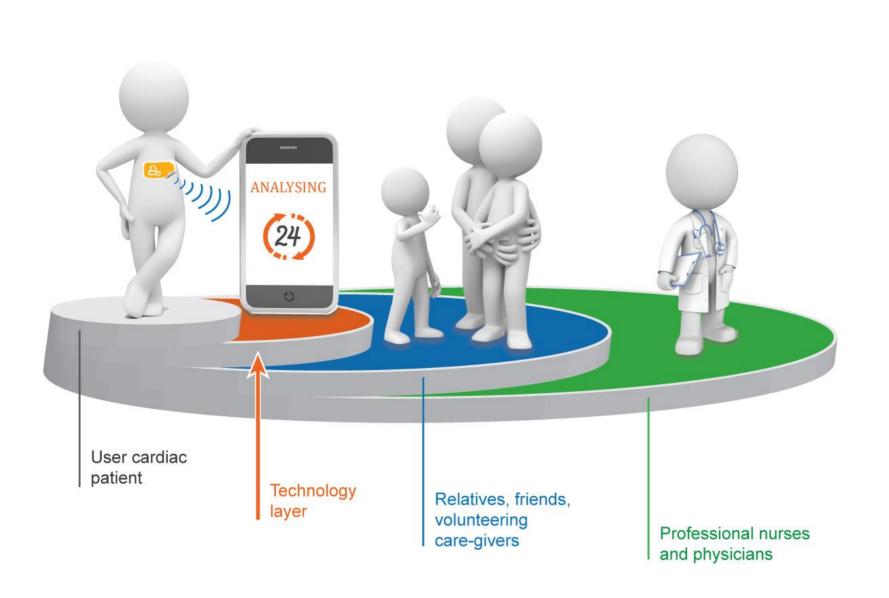
Measures ECG

Low energy Bluetooth 4.0

#### + temperature sensor + accelerometer

Measures ECG

### The technology layer supporting patients and their caregivers



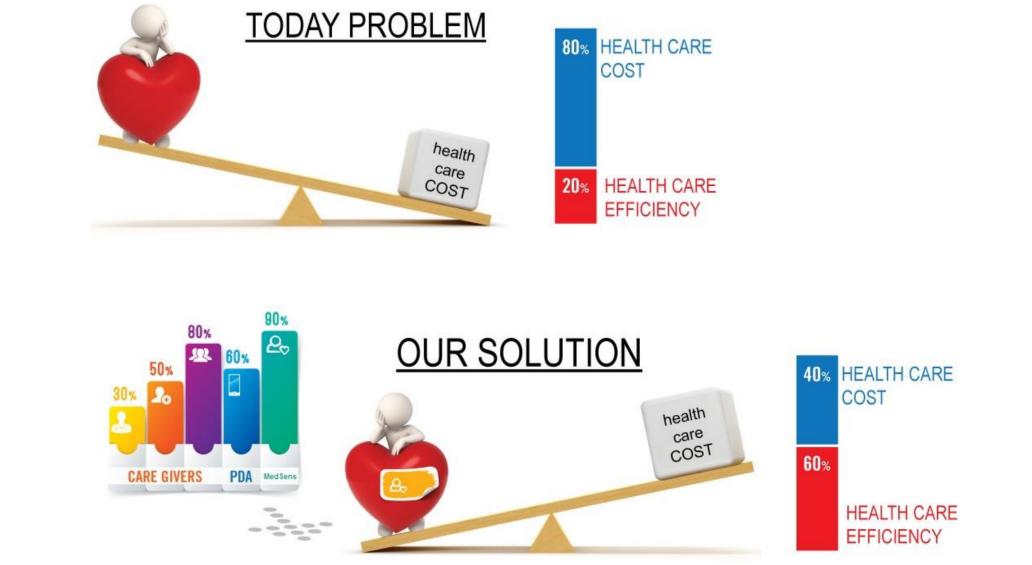
# MedSens will also:

- save energy & user's time,
- **open new jobs** for supporting users and medical personnel,

TTP Impact

increase the opportunities for the industry in development, testing and marketing of new ICT supported health products.

### Increased health care efficiency & Reduced health care costs



## **TTP Facts**

Contact: Roman Trobec E-mail: roman.trobec@ijs.si TETRACOM contribution: 30.000 € Duration: 01/06/2015-31/01/2016



