



**HORIZON 2020**

**PHC-26-2014**

**Self management of health and disease: citizen engagement and mHealth**

**Grant agreement number: 643694**

**Project Title:**

**A co-operative mHEALTH environment targeting adherence and management of patients suffering from  
Heart Failure**



**Newsletter Digest**

**01.04.2017 – 30.06.2017**

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## **The integration of HEARTEN with the Electronic Health Record in the Andalusian Health Service**

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Did you know how important to have a complete Electronic Health Record (EHR) is?

## **Paper accepted at 30th IEEE International Symposium on Computer-Based Medical Systems**

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Our paper entitled "Estimation of heart failure patients medication adherence through the utilization of saliva and breath biomarkers and data mining techniques" has been accepted to be presented in the 30th IEEE International Symposium on Computer-Based Medical Systems.

## **What foods will help you lose water retention?**

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If you are in search of information about foods to help you lose water weight your goal is misguided from the onset. Typically you think fluid weight is fat. You don't even suspect fluid until you are swollen and bloated!

## **HEARTEN project is a pioneer with a complete mHealth solution for HF patients**

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Other similar works are growing; the scientific world is moving towards remote monitoring of patients, avoiding hospitalization and helping patients to live better.

## **During the 3rd, 4th and 5th of May, Everis has been attending the Healthio event in Barcelona (Spain)**

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Healthio is a dynamic and interactive meeting point for e-health sector professionals that counted on conferences, workshops and project presentations. Everis, as sponsor of Healthio, has taken this opportunity to present HEARTEN to the audience.

## **Surveys provide great insight into whether we are meeting the needs of the HF patients.**

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Help us to evaluate HEARTEN system and receive feedback about how you feel about our proposed solution.

## **What is the added value of saliva biomarkers for HF progress?**

[https://www.facebook.com/permalink.php?story\\_fbid=1049874585142748&id=605460052917539](https://www.facebook.com/permalink.php?story_fbid=1049874585142748&id=605460052917539)

As presented in our paper in the BHI 2017 Conference, entitled "Estimation of New York Heart Association class in Heart Failure Patients Based on Machine Learning Techniques" the accuracy of detecting the NYHA Class, without biosensor data was 69%.

### **European Obesity Day 2017**

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Obesity is one of the most challenging public health concerns of the 21st century. It is an epidemic that is sweeping Europe and about which not enough is being done. European Obesity Day 2017 will be held on Saturday 20 May. It brings together healthcare, patient and political communities who are keen to raise awareness of obesity and the many other diseases on which it impacts. The theme for EOD 2017 is Tackling Obesity Together.

### **HEARTEN has provided an article for the Pan European Networks Health issue regarding the project's objectives, scope and expected results**

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The Pan European Networks Health issue brings together a variety of voices in the healthcare area to highlight the latest trends and most cutting-edge developments in European health and healthcare research and policy. By this dissemination action, HEARTEN aims to create more awareness about this project as this publication is sent to circa 80,000 senior policy makers from European Government departments, the EC, the health research community including funding bodies, institutes and Universities.

### **Our paper has just been accepted in the Sensors & Actuators Journal**

[https://www.facebook.com/permalink.php?story\\_fbid=1056170484513158&id=605460052917539](https://www.facebook.com/permalink.php?story_fbid=1056170484513158&id=605460052917539)

In the last decades, the possibility to assess physiological states, monitor disease onset and progression, as well as monitor post treatment therapeutic outcomes through a non-invasive approach became one of the most desirable goals for healthcare research. In this respect, saliva analysis can represent a very interesting biological matrix which has high potential for the surveillance of general health and disease. Potentially important biomarkers are increased in saliva during local and systemic inflammation. In the present study we have developed a highly sensitive biosensor for TNF- $\alpha$  detection in human saliva.

### **New guidance on heart failure tests can improve care**

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According to a new scientific statement from the American Heart Association (AHA) patient deaths and re-hospitalizations could be reduced through using novel tests for heart failure (HF), which can better provide guidance on the diagnosis and management of HF.

### **HEARTEN has been present in the II National Health Hackathon**

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Everis has sponsored the II National Health Hackathon celebrated in Madrid, Spain, from June 9 to 10th in which designers and programmers answer the different patients and health professional needs by developing applications and health games oriented to promote training, education and medical adherence.

### **FORTH has participated in the 16th International Summer School on Biocomplexity, Biodesign and Bioinnova**

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In this event we had the opportunity to present HEARTEN progress related to the data mining and analysis of the patient data as well as the development of the breath and saliva biosensors.

### **Colloquium Spectroscopicum Internationale XL**

<https://www.facebook.com/605460052917539/photos/a.605462249583986.1073741827.605460052917539/1069917663138440/>

Young researchers from UNIFI team have shown the promising results on oral fluid and exhaled breath analysis for the monitoring of heart failure patients achieved by the #UNIFI team as part of the HEARTEN project.

### **YourDATA team has presented HEARTEN project during the presentation of TAULAS coworking project**

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The 9th of June 2017, in Sanluri (Italy), during the presentation of TAULAS coworking project, YourDATA team has presented also HEARTEN project to a wide audience. Many policy-makers attended the event: the most relevant were the Gianluca Cadeddu, Director of the Regional planning centre, Antonella Pilloni and Paolo Usai, from the Municipality of Sanluri.

### **FORTH is attending CBMS conference in Thessaloniki**

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We had the opportunity to present our work entitled "Estimation of heart failure patients medication adherence through the utilization of saliva and breath biomarkers and data mining techniques" and exchange ideas and knowledge with other bioinformaticians and data mining experts.

### **HEARTEN project was presented by SAS in the Innovation Sessions in Virgen del Rocío University Hospital**

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HEARTEN project was presented by SAS in the Innovation Sessions in Virgen del Rocío University Hospital, Seville, Spain (Innovation Sessions in Virgen del Rocío University Hospital).

### **Fish oil supplements provide some benefit after heart attack, heart failure**

[https://www.facebook.com/permalink.php?story\\_fbid=1080105695452970&id=605460052917539](https://www.facebook.com/permalink.php?story_fbid=1080105695452970&id=605460052917539)

Did you know what benefits fish oil supplements provide to you heart? In this article of the American Heart Association News, they explain the relationship between the Omega-3 Polyunsaturated Fatty Acid (Fish Oil) supplementation and the prevention of clinical cardiovascular disease.