



JUNTA DE EXTREMADURA



Unión Europea

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# BUENAS PRÁCTICAS

## Operaciones Cofinanciadas

**Implementation of interoperable  
information systems in digital health**

**Extremadura Health Service**

# Programa Operativo de Extremadura

**Fondo Europeo de Desarrollo Regional**

**Año 2017**



## **Implementation of interoperable information systems in digital health**

In order to continue advancing in the evolution of the so-called health 2.0, digital transformation of health, interoperability and integration of information systems in the field of the National Health System and Europe, Extremadura Health Service is implementing the tool SAP EHP7 that allows healthcare professionals to perform a network, collaborative, remote assistance, online clinical sessions that are also safe and adapted to the times in which we are currently moving.

It is increasingly necessary today the implementation of interoperable information systems, which allow exchanging information in a transparent way between different applications, for the professional so that the end user who uses them perceives them as a single information system. Likewise, the exchange of health information should be possible between different health services and even the European Union.

In health we talk about making a system that allows to connect the departmental information systems with the central information systems; that the central information systems can operate with each other; that the SES information systems allow interoperability with the information systems of other Health Services of the National Health System. All this in the field of interoperability between Public Health Services.

Likewise, it is necessary to interoperate with the information systems of the private sphere, either through derivations, concerts or any other type of relationship, in order to obtain a single information system.

The National Interoperability Scheme (NIS), which marks the Law 11/2007 of electronic access of citizens to Public Services, establishes the contribution of interoperability to the realization of the right of citizens to communicate with Public Administrations through of electronic media. Establishes in turn the National Security Scheme (NSS), which is also included in Law 40/2015 on the Legal Regime of the Public Sector in its article 156.

In compliance with this regulation, it is necessary to address, among other investments, the acquisition of compact computers and monochrome printers for the positions of the Extremadura Health Service professionals.

The investment that motivates the presentation as a good practice consists of the acquisition of 3,325 compact personal computers and 1,200 monochrome printers for the professionals' jobs

that allow implementing the new solutions necessary for the integral functioning of the innovative information system which is materializing in the Extremadura Health Service.

This investment is co-financed at 80% by the ERDF in the thematic objective Improve the use and quality of communication information technologies and access to them, whose investment priority is the reinforcement of the applications of the TIC for electronic administration, electronic learning, electronic inclusion, electronic culture and electronic health.

The action is part of a plan to modernize the regional administration in health (e-health). This phase of implementation of an interoperable information system in digital health has involved an investment (public expenditure) of 2,539,769.13 euros, with 80% of this amount co-financed by ERDF, which amounts to 2,031 .815.30 euros.

The population covered by basic services of digital health of the Regional Health Service are 1,062,952 people impacted by this action, so that an economy based on new technologies, the digital society and the efficient use of resources, in accordance with the proposed objectives.

This action is considered Good Practice because:

**The action has been conveniently disseminated among the beneficiaries, potential beneficiaries and the general public:**

The action has been disseminated in compliance with the obligations regarding communication, as can be seen in the following samples:



*Screen printing on computers*



*Screen printing of printers*

In addition, has been published in the press whose dissemination has been directed to the general public, which has meant that the information covers a much larger field of population.

SECCIONES  **HOY**

**Extremadura** Sucesos Extremadura Extremeños de HOY Tren Extremeño

## El SES reemplazará más de un tercio de sus equipos informáticos



Dos trabajadoras del SES con uno de los equipos informáticos. / J.V. ARNELAS

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J. LÓPEZ-LAGO

Domingo, 3 septiembre 2017, 08:58



El **Servicio Extremeño de Salud** (SES) va a renovar ordenadores y para ello se ha previsto una partida de **3.598.461 euros**, que es lo que figura en el presupuesto base de licitación. En total se prevé la adquisición de 3.325 ordenadores personales compactos sin sistema operativo y 1.200 impresoras monocromo. Esto supone **sustituir aproximadamente el 37% de los ordenadores** existentes y el 18,4% de las impresoras.

Según explica el SES, de los aproximadamente 9.000 ordenadores que existen en las consultas, el 22,5% de los equipos tienen más de 10 años, el 38,9% tienen entre 6 años y 10 años, el 13,5% tienen entre 4 y 6 años. Así mismo, un tercio de todos estos equipos han sufrido averías por un importe superior a su valor de compra.

La Administración sanitaria extremeña pretende con ello seguir mejorando la prestación a los pacientes, tanto actualizando los historiales como mejorando el trabajo en red de los profesionales, así como mejorar cuestiones relacionadas con las sesiones clínicas 'on line', videoconferencias o tarjetas digitales con firma digital, entre otras cuestiones.

Por el primer lote se pagaría hasta 3,2 millones, por el segundo 348.000 euros. Esto significaría que cada ordenador saldría como máximo al SES por 977,44 euros, y cada impresora por 290,40 euros. El periodo de garantía de los equipos deberá ser de cinco años

La adquisición estaría cofinanciada el 80% por los fondos europeos Feder teniendo en cuenta que uno de los puntos de su programa operativo 2014-2020 habla de «refuerzo de las aplicaciones de las TIC para la administración electrónica, el aprendizaje electrónico, la inclusión electrónica, la cultura electrónica y la sanidad electrónica».

### El 22% de los PC tiene más de diez años y el 38% más de seis, por lo que hay averías frecuentes

Sobre un total de cien puntos, los licitadores podrán obtener hasta 80 puntos según su oferta económica. Los 20 restantes se reparten en el rendimiento del ordenador debido a sus características (13 puntos), y las prestaciones del monitor (7 puntos).

En cuanto a las impresoras, la oferta económica se valora igualmente con 80 puntos de un total de cien, mientras que los 20 restantes se fijan según varios parámetros relacionados con las prestaciones.

El plazo para presentar proposiciones es de cuarenta días naturales a partir de su publicación en el **diario Oficial de la Unión Europea** (salió el 10 de agosto), mientras que el plazo de adjudicación será de dos meses a partir de la apertura de las proposiciones.

### The action incorporates innovative elements:

The most innovative is the increase in interoperability between the multiple health information and management systems, among professionals of the health system of Extremadura, and with the National Health System, health system of the different Communities Autonomous, even from private health systems. All this in order to increase the quality of care, shortening times and distances and improving the work of health professionals.

### Adaptation of the results obtained to the established objectives:

The results obtained is that digital health reaches the entire population of Extremadura. all this in line with the proposed objectives of improving the equipment with the necessary connectivity in the Extremadura Health Service centers, and facilitating and optimizing the work that all professionals of the public health service perform for the population of the region.

### Contribution to the resolution of a problem or weakness detected in the territorial scope of execution:

The growing health demand of an aging population, together with the geographic dispersion of our region, affects the care practice and prevention because there is a shift from the diagnosis site from the hospital to the Primary Care centers and from there to the address of the patients. This fact makes it necessary to have an interoperable system, establish new information systems that provide greater agility and efficiency in the management of professionals in the Extremadura Health Service, allowing information to be exchanged transparently between different applications. With these equipments, an interoperable system has been achieved, allowing to provide health care of a higher quality to the patients of the Extremadura Health Service.

Having interoperable systems saves time and distance barriers, citizens enjoy a greater degree of independence to be able to share and access health information from anywhere, while the health professional can provide personalized attention in mobility. The healthcare professional can consult the information and data to the patient's Clinical History in a centralized manner in a timely manner, thanks to these new computers with the appropriate functionalities and performance capable of supporting the implementation of the SAP EHP 7 tool.

In short, get:

- Increase gradually the number of services to citizens at the speed that technology, allowing improve their quality of life and increase their degree of independence.
- Health centers without patients: there is an increase in the number of citizens who do not need to go through a consultation to receive health care, thus increasing their level of independence.
- A more effective and efficient hospital environment that minimizes the patient's stay and where technologies and techniques increase the effectiveness of treatments and interventions.
- Some professionals better informed and some patients more monitored.
- A provision of services when and where it is needed.

### **High degree of coverage on the population**

The population coverage will be 100 of the Extremadura population, which quantified by number of individualized health cards (TSI), according to CIVITAS data is 1,062,952 people as of December 31, 2017.

### **Consideration of the horizontal criteria of equal opportunities and non-discrimination, as well as social responsibility and environmental sustainability:**

In relation to the criteria of equality of opportunity and non-discrimination, the implementation of these measures, to advance the digital transformation of health, contemplates horizontally that health professionals such as patients, are discriminated against at any time by the actions that are carried out from the health field.

These principles are also taken into account in the language used to communicate, inform and publicize the actions from the Extremadura Health Service.

On the other hand, the Extremadura Health Service has complied with all the environmental legal requirements applicable to the activity carried out and is committed to the European guidelines on environmental responsibility, the prevention and repair of environmental damage that could result from the application of these actions.

### **Sinergias Synergies with other policies or instruments of public intervention:**

This project has contributed to reinforce the objectives and strategies marked in the Health Plan of Extremadura 2014/2020.

Likewise, it is part of the commitment acquired in the Digital Agenda of Extremadura, the Regional Strategy for Smart Specialization (RIS3) and the Digital Agenda of Spain.