# Procurement and assembly of equipment for the provision of healthcare services at the new Vigo Hospital

The Galician Healthcare Service (Sergas) has implemented the "Procurement and assembly of equipment for the provision of healthcare services at the new Vigo Hospital". This initiative includes the "new Vigo hybrid operating room", which is the subject of this best practice document.

The net eligible cost of this operation amounts to 45,829,485.17 euros, with 80% (36,663,588.14 euros) financed by ERDF and the remaining 20% (9,165,897.03 euros) funded by the Galician Regional Government. The aim is to provide hospital services to over 400,000 people in the metropolitan area of Vigo.

The project has equipped the new surgery wing of the Álvaro Cunqueiro Hospital with advanced technology, i.e. 2 integrated operating rooms and 4 endoscopic surgical towers for general surgery, ENT and urology.

Each of the integrated operating rooms includes a tower for general endoscopic surgery and another for urology and gynaecology, as well as surgical lights, a central control system, surgery/endoscopy columns, ceiling-suspended arms, an image and sound system, an image capture and digitization system and a communications system.



The greatest advantage of using this type of surgical equipment has been an increase in the amount of laparoscopic surgeries performed in the aforementioned areas of specialization, with associated comparative advantages compared with open surgery: thanks to the lesser aggressiveness of the techniques involved, patients recover faster and therefore spend less time in hospital and return earlier to their everyday life, with a reduction in surgery-associated pain and enhanced safety during surgery. In addition to the benefit for patients, there will also be a number of advantages for the healthcare organisation, viz. reduced operating time and improved surgical efficiency, enabling the operating room to be used for more patients thereby reducing waiting lists.

The hybrid operating room is a surgical facility equipped with a cutting-edge imaging system providing more precise 3D images during surgery and requiring a much lower radiation dose than traditional systems, thereby enhancing safety for both patients and practitioners. Additionally, advanced software applications allow mainly vascular and heart surgery procedures to be performed.

#### This is considered best practice in accordance with the applicable criteria:

### It has been correctly publicised to beneficiaries, potential beneficiaries and the general public.

The provision of the new equipment has been correctly publicised in accordance with the regulation governing information related to EU funds co-financed by the ERDF via an information poster on the funds supporting the operation placed in prominent public locations. The information poster has the following format:







galicia

### ADQUISICIÓN E MONTAXE DOS EQUIPAMENTOS PARA A POSTA EN MARCHA E FUNCIONAMENTO DOS SERVIZOS SANITARIOS NO NOVO HOSPITAL DE VIGO

Operación cofinanciada pola Unión Europea

Programa Operativo FEDER Galicia 2014-2020

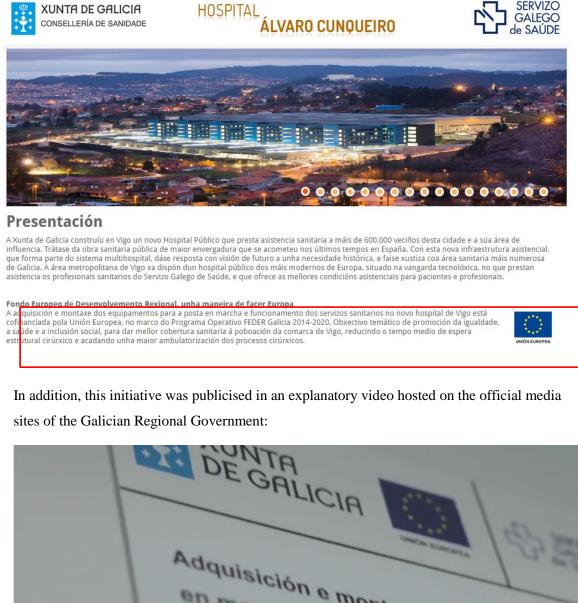
Promoción da igualdade, a saúde e a inclusión social

Unha maneira de facer Europa

The following picture shows one of the posters placed at the entrance of the new hospital:



During the implementation of the initiative, the public was also informed of the support received from the funds via a brief description published on the internet, including goals and outcomes, highlighting the financial support provided by the European Union, as illustrated in the example below:



Adquisición e montaxe dos equipamento en marcha e funcionamento dos servi novo hospital de Vid





Novo Quirófano Híbrido do Hospital Público Álvaro Cunqueiro

#### The initiative includes several innovative elements

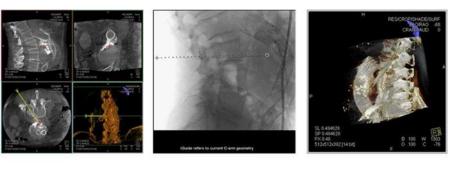
The integrated operating room can be defined as a computer-based system equipped with the most advanced technology in surgical communication, making it possible to centrally control some or all of the devices and/or functions of an operating room via touch screen or voice. In addition, it enables surgeons to work interactively with other areas, facilitating real-time access

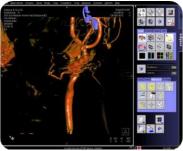
to all patient-related information such as medical records or imaging tests (endoscopy, X-rays, ultrasound, etc.), in line with clinical and technological changes and compatible with new advances such as image-guided surgery, robotics and telemedicine.

In an integrated or intelligent operating room, the equipment and systems are located in arms suspended from the ceiling, eliminating floor-level connections and installations, with several information screens and a control centre which enables the integration of equipment and communication, navigation and video-assisted surgery functions. The aim is to contribute to making interventions less invasive, more accurate and safer for the patient.

In addition to integrated operating rooms, endoscopic towers equipped with all of the necessary accessories for use in different surgical fields are included, viz. 2 units for general surgery, 1 unit for urology and 1 unit for endoscopic surgery.

The hybrid operating room is a robotic system equipped with a powerful articulated arm with panoramic flat screens and an operating table functioning in synchrony with the equipment. It incorporates new imaging tools, real-time image matching, advanced tools to simplify vascular surgery procedures, advanced tools for heart surgery and other tools to identify injuries.







#### **Compliance with the goals set**

The equipment recently acquired by the Vigo Hospital has enabled both working teams and the way in which the hospital is organised to adapt to the current times.

This modernization process has increased safety for patients undergoing surgery by reducing the time required. The success rate of these operations is also increased, as more resources are available for monitoring purposes.

Finally, the average waiting time for certain medical specialties will be reduced, as more people can be treated.

# Contributing to solving a problem or weakness detected in the territorial area of implementation

Endoscopic surgery is a minimally invasive microsurgery that allows the exact location of the pathology to be visualized while providing the patient with a more precise treatment. Unlike traditional "open" surgery, this procedure has the great advantage of avoiding extensive

dissection and is more anatomical and physiological, thereby reducing trauma and risk for the patient.

Although this technique has been used in hospitals for some years, the purchase of the new equipment reinforces the use of endoscopic surgery with the most advanced technology, allowing for more complex and less invasive surgical interventions to be performed with greater safety, thereby minimising the risk for patients and enabling a speedier and better recovery.

The improvement brought about by the incorporation of the hybrid operating room to the surgery wing – the most complex and advanced in Spain – makes it possible to perform vascular and heart surgery procedures on more complex or higher risk patients with less invasive surgical techniques and improved safety thanks to the powerful imaging tools used and a significant reduction in operating time and radiation doses. This will contribute to a better and faster recovery for patients and will lead to improved safety for both patients and practitioners.

#### High level of coverage for the target population

The technological improvement brought about by the purchasing of this equipment will benefit patients and have an impact on the population covered by the Integrated Management Organisational Structure (EOXI) of Vigo, amounting to over 400,000 people.

It will also be the designated hospital for some of the EOXI procedures carried out in Ourense, Verín and Barco de Valdeorras and POVISA, effectively benefitting an even broader population.

## Observance of horizontal equal opportunities and non-discrimination criteria and social responsibility and environmental sustainability

These criteria were duly observed during the tendering process used to select the company that supplied and installed the integrated operating rooms, as well as the endoscopic towers and the hybrid operating room. These criteria are included in the terms and conditions for tender to be taken into account in the event of a tie in the final bid evaluation process. More specifically, priority is given to companies with a number of permanent employees with a disability greater than 2%, followed by companies that have implemented an equal opportunities plan.

An equal opportunities policy is reflected through the use of neutral language, avoiding sexist language at any times, images with human faces or infrastructures which benefit either gender, as it is a healthcare facility and therefore benefits everyone equally.

The increasing use of digital and electronic media reduces paper consumption and favours environmental sustainability.

#### Synergies with other policies or tools for public intervention

The acquisition of this sophisticated equipment makes it possible to store medical images (X-rays, ultrasounds, etc.) more conveniently in a digital format, increasing the scope and usefulness of the  $\acute{E}$ -Saúde application, which provides patients with mobile phone access to X-rays taken at the hospital for example, as well as checking appointments.