



# eHealth

TRANSFORMATION HANDBOOK  
2022



# Transformation is in our DNA

The public health and economic crisis triggered by COVID-19 has focused our minds on the need for **a swifter economic and social transformation** – the only way we can count on a full recovery and get back on track for growth.

We believe that **digitalisation is key** to making this transformation possible. Technologies such as 5G, cloud storage, cybersecurity, AI, big data and IoT will be game-changing – as demonstrated by our extensive catalogue of solutions, applications and use cases. Our capacities and experience make us the perfect partner for businesses and local authorities as they take on the digital challenge.

We stand for a **fair, inclusive and sustainable digital transformation**. Our mission is to harness technology for people and planet, lightening the environmental load and offering our clients solutions that get them working more efficiently and sustainably.





# eHealth:

**the only alternative for the survival of the healthcare sector**

The healthcare sector is completely unsustainable at present, due to an ageing population and increases in chronic health conditions. The only solution to reverse this process is by using technology.

At Telefónica, we have the experience and capacity to propel the use of new technology in the sector, in order to help make it more sustainable.

Thanks to technology, the healthcare sector is undergoing a paradigm shift towards being more proactive and less reactive, preferring to keep the patient looked after at home and not in hospital.

# How we are revolutionising the healthcare sector

## VALL D'HEBRON HOSPITAL

### TRACEABILITY IN THE SURGERY UNIT

We are rolling out a traceability system based on an RTLS (Real Time Location System) to optimise the surgical process, increasing the efficiency of procedural flows, boosting patient safety, as well as improving the updates provided to relatives.



## QUIRÓNSALUD HOSPITAL

### FIRST OPERATIONS IN SPAIN TO APPLY 5G AND VIRTUAL REALITY – MALAGA

Application of collaborative endoscopy. Using 360° cameras, virtual reality headsets and having access to every parameter at the endothermic source, as well as 4K images, all connected via fibre optics or 5G and in real time, makes the tool very useful for training sessions and medical conventions where operations are carried out in real time.



## MOVILPACK

### GEOLOCALISED TRANSPORT OF LIVING TISSUE BETWEEN HOSPITALS

Geolocation system that enables the movement of biological products, stem cells and organs. The system enables communication and transfer, as well as improved route planning and cargo status monitoring, thanks to mobile geolocation technology.



# How we are **revolutionising** the healthcare sector

## **MOVISTAR SALUD**

GROUNDBREAKING TELEMEDICINE  
SERVICE, AVAILABLE ANY  
TIME AND ANYWHERE

Web platform and app that offer immediate access to general practitioners, specialists and nutritionists via calls and video calls. It also offers a Get Fit programme and online symptom assessment technology. This is a product by Telefónica and Teladoc Health, a leading telemedicine brand.



## **CAMBRIDGE UNIVERSITY HOSPITAL**

DIGITAL  
TRANSFORMATION

Comprehensive professional cloud services that offer a complete set of IT, cloud and security solutions, helping create a modern workplace and upgrading networks.



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## TESTIMONIALS

What our clients say...



● ● ● Dr. Pedro José Rosón Rodríguez | **Quirónsalud Hospital Málaga**  
**Head of Digestive System Service**

*"Thanks to 5G technology, this project enables us to transfer the real experience of being in an endoscopy unit, remotely performing endoscopic procedures to the highest level from another location. We believe that the possibilities for remote training and mentoring will change the way doctors relate to each other, along with the way we transfer knowledge."*

Dr. Juan Antonio Hueto | **Institut Català de la Salut**  
**Hospital Surgical Processes Coordinator** ● ● ●

*"Having automated access to the patient's location makes their journey through the area much safer, as it eliminates the potential for human error when moving from one place to another. By digitalising all the information recorded by the system, we will be able to analyse patient flows within the unit and optimise the way we work in the operating theatres."*



● ● ● Juan Pedro Yunta | **Movilpack**  
**CEO**

*"This geolocation tool keeps the client updated with the status of their shipment at all times, and they can make decisions or find solutions to ensure the successful delivery of the product."*

Dr. Afzal Chaudhry | **Cambridge University Hospital**  
**Director of Digital and Clinical Information** ● ● ●

*"On behalf of CUH and all of our patients, I cannot thank you [Telefonica] enough for the work that you do in many aspects it far exceeds what we might reasonably expect at a 'contractual' level each and every time you all are working side by side with us to deliver a vast amount of change."*





# Tracking:

## Vall d'Hebron Hospital



One of the focal points of hospitals is the surgery unit. Hospitals have longer waiting lists these days, which makes it absolutely essential to optimise the use of operating theatres, to ensure that as many surgeries as possible are performed, with the best guarantees always in place for patients and professionals.

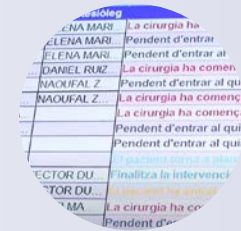
With this project, the Vall d'Hebron University Hospital aimed to optimise its surgical process, increasing the efficiency of procedural flows, boosting patient safety as well as improving the updates provided to relatives.

### SOLUTIONS

- End-to-end automation of communications between the different departments in charge of the surgical process.
- Installation of an automated control system for the operating theatre, by means of sensors.
- Creation of an app where relatives can check the status of the patient in real time.

### BENEFITS

- A more efficient process, optimising the work of the surgeons.
- Improving patient safety.
- Improving the flow of patients.
- Enhanced availability of information for professionals and family members.
- 10% increase in surgical performance.
- Savings of between €7,500 and €12,000 per surgeon per year.
- Cost savings of €1.4 to €2.3 million per year.



NAME	STATUS
ELENA MARI	La cirurgia ha
ELENA MARI	Pendent d'entrar
ELENA MARI	Pendent d'entrar al
DANIEL RUIZ	La cirurgia ha comen
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# Quirónsalud Málaga:

## first operations in Spain to apply 5G and VR

5G

RV

BIG DATA

The Digestive Endoscopy Institute at Quirónsalud Hospital in Malaga needed to apply **collaborative endoscopy**, in order to obtain real-time support from specialist doctors at other hospitals, and even in other countries, to resolve queries and issues during operations. The second objective of the project is to provide healthcare professionals with continuous training, teaching them new techniques via remote tutoring. This helps to make education more inclusive and reach a wider audience. The main objective is to **give everybody the same access to training**.

### SOLUTION

To create a virtual operating theatre, where attendees in Madrid can view endoscopies in real time, while they are being performed live in the operating theatre in Malaga. To achieve this, a 360° camera and a camera of the theatre itself are installed. 5G and fibre technology is used. Operation parameters and voice communication are also broadcast.

### BENEFITS

- Support and assistance in complicated operations, where an expert in the field is required.
- Standardised healthcare.
- Practical and realistic medical training.



### FURTHER INFORMATION

**Press release:** [Quirónsalud Málaga Hospital and Telefónica present the first system of expert remote assistance to surgeries based on 5G and the integration of medical data through augmented reality.](#)



# Movilpack:

## geolocalised transport of living tissue between hospitals



An innovative geolocation system allows the company to transport biological products, stem cells and organs between medical centres and laboratories in Spain and Europe. The system means that hospital healthcare teams interested in transport can communicate or go to the exchange sites, and also improve route plans, thanks to mobile geolocation technology. GeoGestión is a management solution that provides real-time location and planning of activities and routes.

### SOLUTION

To develop a fully geo-localised transport system for biological products, so that the medical teams involved have access to the location and status of the organ or tissue at all times, via the GPS system on their smartphones.

### BENEFITS

- Accurate information on timing and location in real time, incorporating information on the chain of custody and relevant conditions (temperature, humidity, potential damage during transport, etc.).
- Optimisation of waiting times and service.



# Movistar Salud



This is a telemedicine solution for individuals and companies, offering services related to immediate medical care, health and wellness. One of the main challenges in the healthcare sector is the high volume of activity associated with less complicated cases, caused by the lack of an efficient system of assessment, triage, solution and/or referral of cases. Experience shows that more than 75% of these situations can be resolved remotely and that, in the remaining cases, proper guidance on how to access traditional healthcare systems plays a key role in solving issues more effectively and efficiently.

In response to this challenge, Movistar Salud, an innovative digital health product launched by Telefónica in partnership with Teladoc Health, a world leader in telemedicine services, was launched in November 2020.

## SOLUTION

- Platform accessible via an app and website.
- Instant phone calls and video calls with general practitioners, specialists and nutritionists.
- Medication prescription and diagnostic tests.
- Get Fit programme to improve well-being.
- Automated symptom assessment based on artificial intelligence.
- Home visits by healthcare professionals.
- Comprehensive patient care combining remote and face-to-face care.
- Psychology and nutrition therapy.
- Integration of IoT devices.
- Marketplace for healthcare products and services.

## BENEFITS

- Instant contact with a healthcare professional 24/7 from anywhere.
- 100% of cases and queries resolved 75% of cases resolved completely remotely.
- Queries solved in less than 20 minutes on average.
- Removes the need for unnecessary travel.
- Reduces wait times for quality healthcare.
- Reduces risk of infection in medical centres.
- Helps to clear the health services backlog.
- 94% of service users were fully satisfied.



# Cambridge University Hospital:

## digital transformation



End-to-end service delivery includes installing new secure platforms for hosting applications – including the medical records system, EPIC – upgrading end-user computing devices and printing solutions, installing resilient and reliable networks and delivering technology that will enable the hospital to achieve its goals as a digital leader.

### SOLUTION

We have designed, built and supported the infrastructure to assist the rollout of EPIC, to replace the previous fragmented systems. This single registry contains a record for each patient, which helps the hospital to understand and plan better care and services for them.

### BENEFITS

This project is playing a key role in the modernisation of health and care services, creating fully integrated electronic health and social care record systems. Ultimately, it helps the hospital to provide patients with more modern and efficient services.



### FURTHER INFORMATION

**Post:** [Novosco completes transition of multi-million-pound Cambridge hospital...](#)

**Post:** [Novosco completes first phase of major NHS trust deal.](#)



# Other cases from the sector

Enabling technologies such as 5G, IoT, big data and artificial intelligence act as the springboard for the digital transformation of the sector. The following are specific use cases where different stages of the patient process have been enhanced, including diagnosis, treatment and patient follow-up.

## "SMART" COLON CANCER SCREENING – SESCOAM



This solution creates automated processes, incorporating all the individuals involved and the clinical data with efficient change management, allowing healthcare professionals to continue working with their usual applications.

## DIGITALISATION OF THE SURGERY UNIT AT SALAMANCA HOSPITAL



The platform enables signals to be transmitted from 25 operating theatres with different levels of integration, all over IP video. Each operating theatre will be equipped with computer equipment and touch screens, as well as medical monitors, which will display the images produced and received by the hospital network.

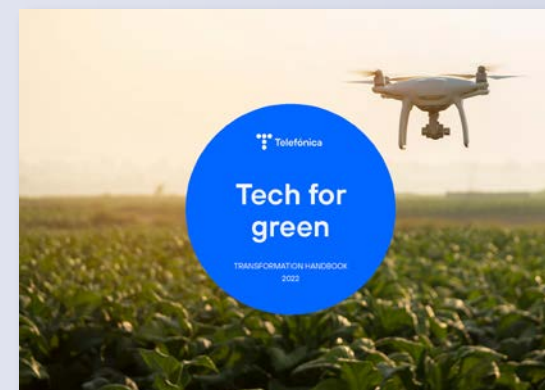
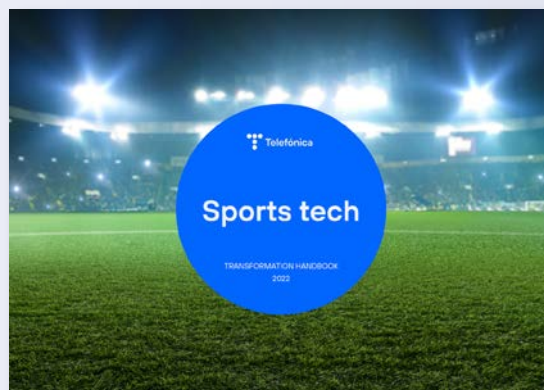
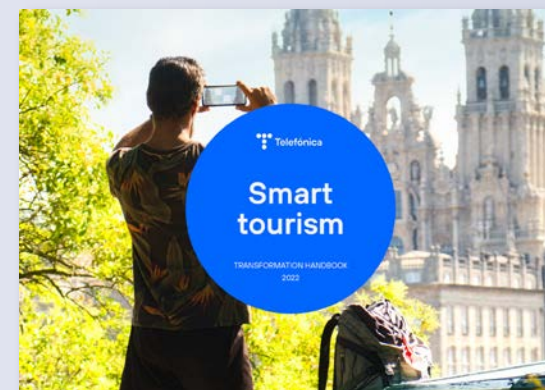
## VALCRÒNIC: MONITORING PATIENTS WITH CHRONIC CONDITIONS



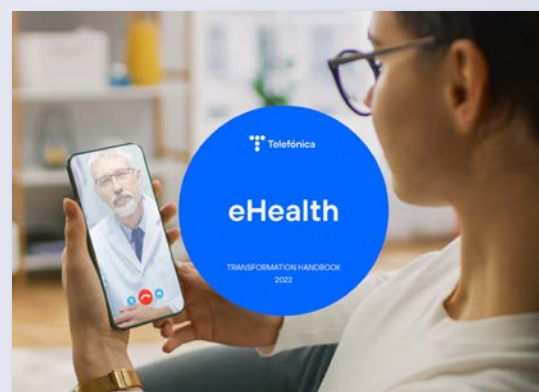
This scheme reduced the number of hospital visits from patients with chronic conditions by 52%. The e-Health solution enables the agency to remotely monitor patients with chronic conditions, making their lifestyles healthier and helping patients to care for themselves by educating themselves with health-related content.



# Transformation handbook collection



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