# Digital Skills for Health Professionals

*Marisa Merino*

*Bilbao, 21 June 2019*

Osakidetza
TOLOSALDEA ERAKUNDE SANITARIO INTEGRATUA
ORGANIZACIÓN SANITARIA INTEGRADA TOLOSALDEA

EUSKO JAURLARITZA GOBIERNO VASCO
OSASUN SAILA DEPARTAMENTO DE SALUD

# Basque Country's Health System

- Population: 2,17M
- **Public health system** financed by taxes
  - over 30% government budget
- **Universal Healthcare coverage**
- **Department of Health of the Basque Government**:
  - policy and regulation, public health, health planning, insurance and financing
- **Healthcare providers**
  - Basque Health Service-**Osakidetza**
  - Some private health centres

# Osakidetza

- 13 Integrated Care Organisations
  - 14 Acute Hospitals
  - 313 Primary Care centers
- 3 Sub-acute Hospitals
- 3 Mental Health Nets
- +30.000 Healthcare professionals

# 2017-2020 Basque Health Department Strategy

1. **People** as the central axis and combat inequalities in health
2. **Health promotion and Prevention**
3. **Chronicity, old age dependency**
4. **Sustainability** and modernization of the system
5. **Professionals**
6. **Research and Innovation**

**Population ≥ 65 years: 21,4 %**

# CHRONICITY

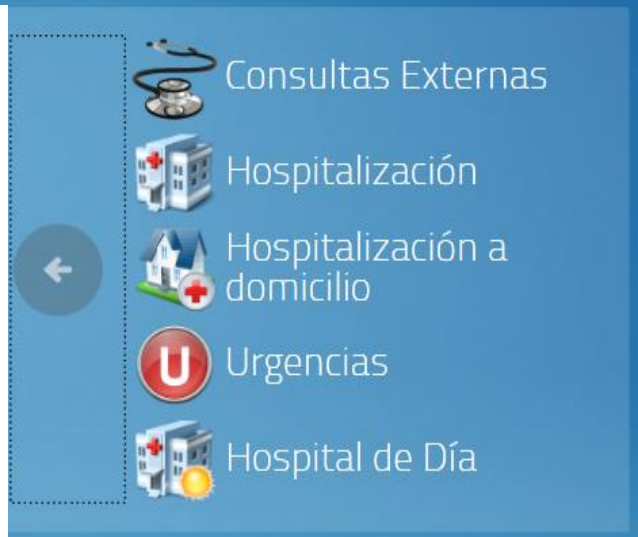
**R**
**I** **ICT**
**S**
**I** **INNOVATION**
**S**

## Osakidetza bet on new technologies

Osabide Global
Historia Clínica

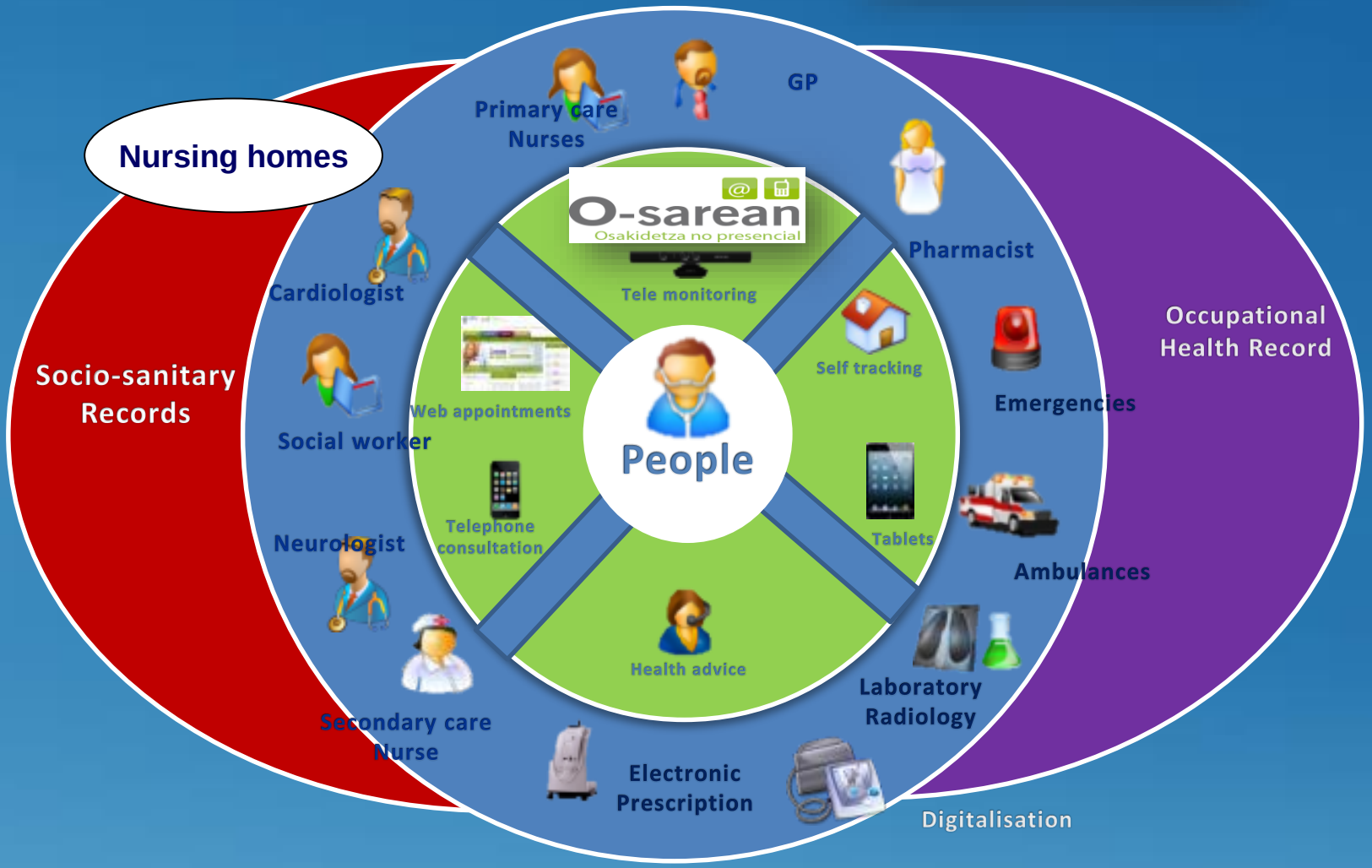
Osabide Global is not only a medical record, but also a **working station**.

Shared by all care areas providing an **overall vision**.



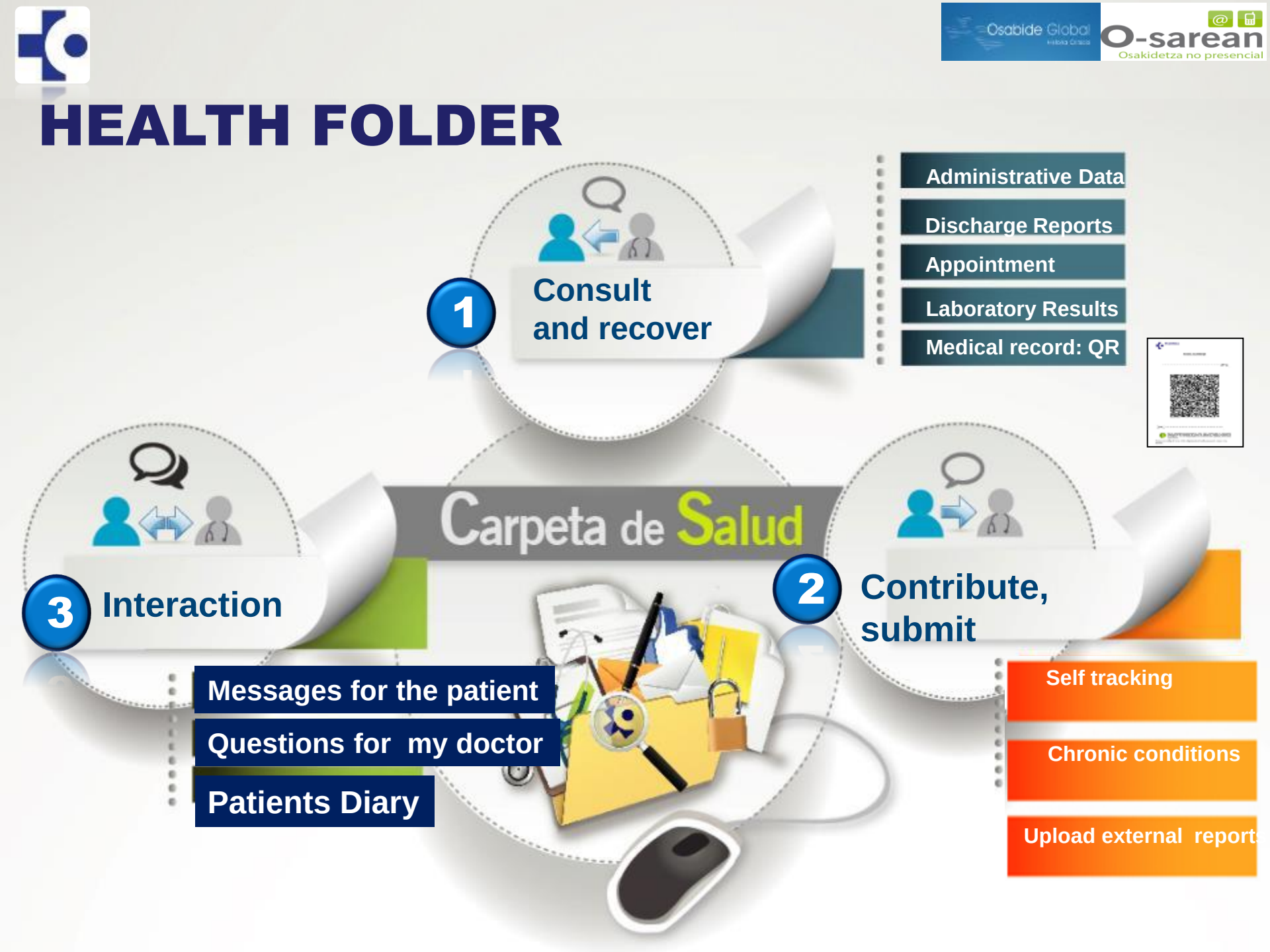
Registro de enfermería
Prescripción Electrónica Hospitalaria
Historial Farmacoterapéutico Unico
Radiología Digital 100% AP + AE
Atención no Presencial
Atención por Procesos
Ebook del paciente
Plan Director de Laboratorios
HIS de Osakidetza
Formularios
Diagnósticos
Atención Primaria
Osakidetza Business Intelligence
Osabide Global
Historia Clínica
O-sarean
Osakidetza no presencial
Ambulancias
Anotación Médico de Guardia
Documentos del paciente
Últimas actividades.15
Tratamiento habitual.12
KodifiKa
Osakidetza
EUSKO JAURLARITZA
GOBIERNO VASCO
OSASUN SAILA
DEPARTAMENTO DE SALUD

# New channels

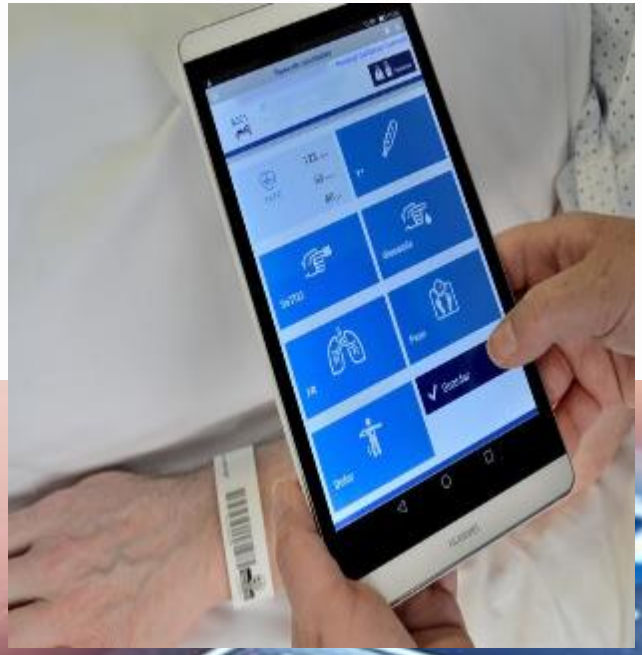


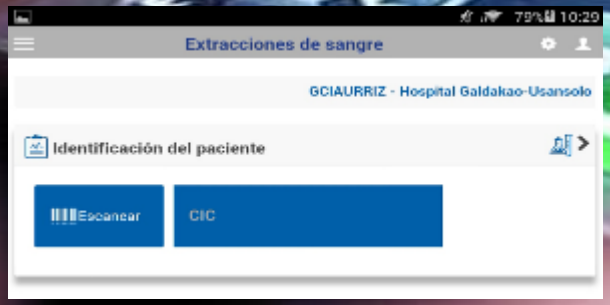
# *Communication between professionals*

# HEALTH FOLDER



# Osakidetza Apps





# Integrated Health Organizations in Osakidetza

Population approach

## CULTURAL CHANGE

### GOVERNANCE

- Centrality
- Leadership
- Innovation
- Connectivity

### MISSION AND VISION

- Goals
- Patient-centered

### PERFORMANCE

- Tools
- Information exchange

### INTERNALIZE

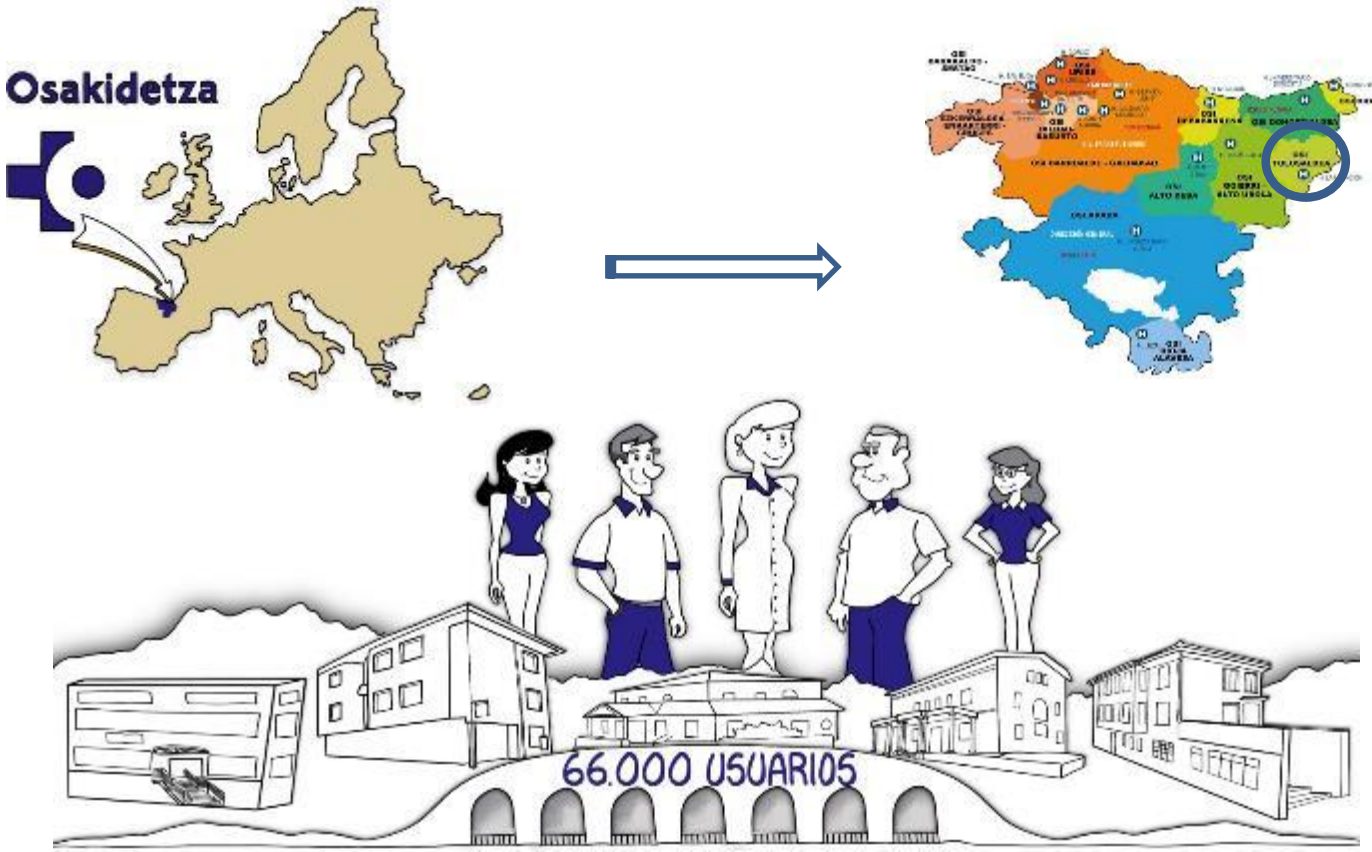
- Mutual knowledge
- Trust

## GOVERNANCE MODEL

- Funding model
- Strategic approach
- Management Model
- Organizational structure

Integrated Care
Productive interactions

# TOLOSALDEA INTEGRATED HEALTHCARE ORGANIZATION



## MANAGEMENT SYSTEM

## PARTICIPATION

## TOLOSALDEA IHO

## LEADERSHIP

## SKILLS

11

# IDENTIFICATION AND DEFINITION OF MANAGEMENT SKILLS

| MANAGEMENT SKILLS | DEFINITION |
|---|---|
| SYSTEMIC VISION | Development of population, systemic and organizational approach, strategic planning, population health management, and risk stratification |
| PEOPLE-CENTRED CARE | Development of client-focused attention, evaluation of patient experience, comprehensiveness |
| PARTICIPATION | Inclusive health development, participation techniques and co-creation of services and processes, and transparent policies |
| COMMUNICATION | Improvement of external and internal communication, project and results presentation skills, digital marketing and social networks |
| LEADERSHIP | Development of transformational, innovative and knowledge-promoting leadership. Personal effectiveness techniques |
| TALENT MANAGEMENT | Improved interdisciplinary and teamwork. Motivation and talent retention techniques |
| RELATIONSHIP MANAGEMENT | Creation and maintenance of a network of relationships, development of partnerships and alliances. |
| INNOVATION MANAGEMENT | Methods of innovation, knowledge management, technological vigilance and critical success factors. |
| CHANGE MANAGEMENT | Focus on results and evaluation, implementation techniques and change management |
| RESOURCE MANAGEMENT | Fundraising tcehniques, analytic accounting of each process, evaluation of investments and disinvestments , generation of business models (shared risk) |
| DIGITALIZATION | Digital strategy and transformation, digital health, interoperability standards, and digital competencies |

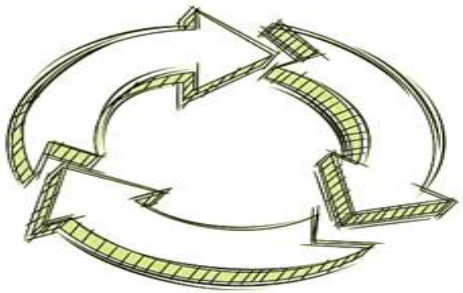
# DIGITAL SKILLS

**The DIGCOMP European framework of digital competencies establishes five dimensions and 21 competences:**

## PERFIL DIGITAL DE LA CAPACITACIÓN

| | | |
|---|---|---|
| Información | ★ * | BÁSICO a2 |
| Comunicación | ★ ★ * | INTERMEDIO B2 |
| Crear Contenido | ★ ★ * | INTERMEDIO B2 |
| Seguridad | ★ ★ - | INTERMEDIO B2 |

## PERFIL DIGITAL PERSONAL



## PERFIL DIGITAL DE LA OCUPACIÓN

Perfil Digital Profesional: Operador de maquinaria para Fabricación Aditiva

# Main ICT activities of the digital health profesional profile

- Clinical Information Search
- Communication and collaboration with remote teams
- Use of information management tools
- Content creation

# 1. Information and data literacy

**1.1 Browsing, searching and filtering data, information and digital content C1**
**1.2 Evaluating data, information and digital content C1**
**1.3 Managing data, information and digital contentC1**

# Osakidetza Virtual Library

MARISA MERINO HERNANDEZ

- Formación
- Docencia
- Solicitudes e inscripciones On Line
- Buenas Prácticas
- Biblioteca
  - Quienes somos y Cartera de servicios
  - Catálogo de suscripciones
  - Base de datos
  - GTBIB - Petición de documentos
  - Cursos
  - Herramientas de investigación
  - Contacta con la Biblioteca
- Dirección de Proyectos

## Biblioteca

Pirámide MBE de las 6S por Eukene Ansuategi & Marimar Ubeda. Biblioteca Hospital Univ. Donostia se distribuye bajo una Licencia Creative Commons Atribución-NoComercial-SinDerivar 4.0 Internacional

La Biblioteca de la OSI Donostialdea constituye un servicio de información y documentación especializado en biomedicina y ciencias de la salud. Su objetivo principal estriba en facilitar al personal de la organización un conjunto actualizado de fondos bibliográficos electrónicos e impresos (Catálogo) y servicios de referencia, que le permita desempeñar con la mejor calidad las funciones asistenciales, docentes e investigadoras de este centro.

Coordinada junto con la Unidad de Epidemiología Clínica y la Unidad de MBE de la OSI Donostialdea, esta biblioteca constituye una Unidad de Información eficiente, orientada a revisar y dotar a sus usuarios con literatura científica críticamente revisada.

Novedades y avisos

**Recursos más utilizados:**

Bases de datos bibliográficas principales.

**Enlaces para estar al día:**

Artículos destacados

Alertas de temas clínicos

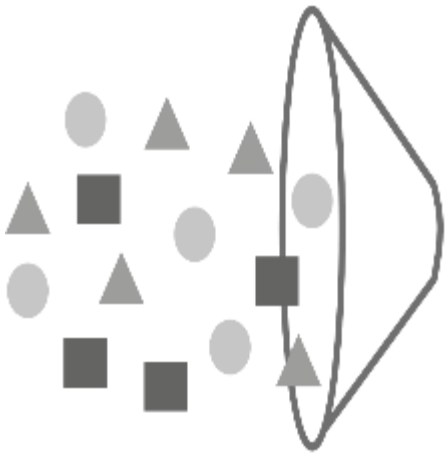
- Quienes somos y Cartera de servicios
- Catálogo de suscripciones
- Base de datos
- GTBIB - Petición de documentos
- Cursos
- Herramientas de investigación
- Contacta con la Biblioteca

# Competitive Intelligence System

It´s a ethical, systematic & collaborative process.

**Ethic**

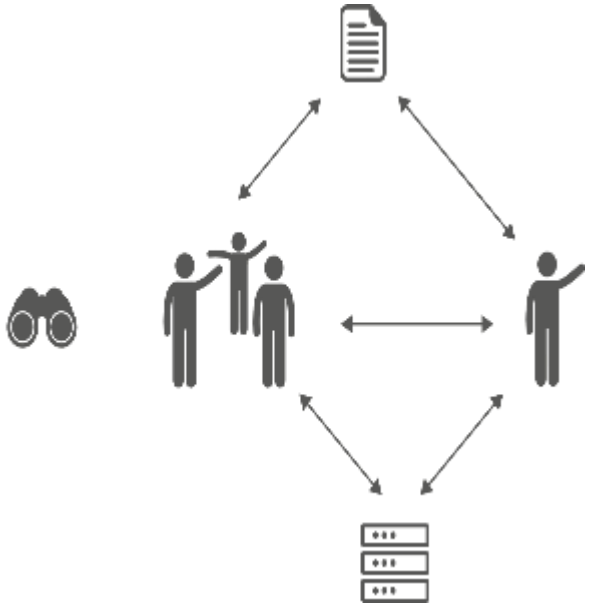
## Systematic



Huge amount of information:
Unstructured & of all types

Classification of
information

## Collaborative



Analysis and evaluation
of all the gathered information

Help to
make decisions

# Innguma

https://www.innguma.com/en

# Information capture

## Information factory

Information Factory brings information into our hands, intelligence and power being the most outstanding characteristics

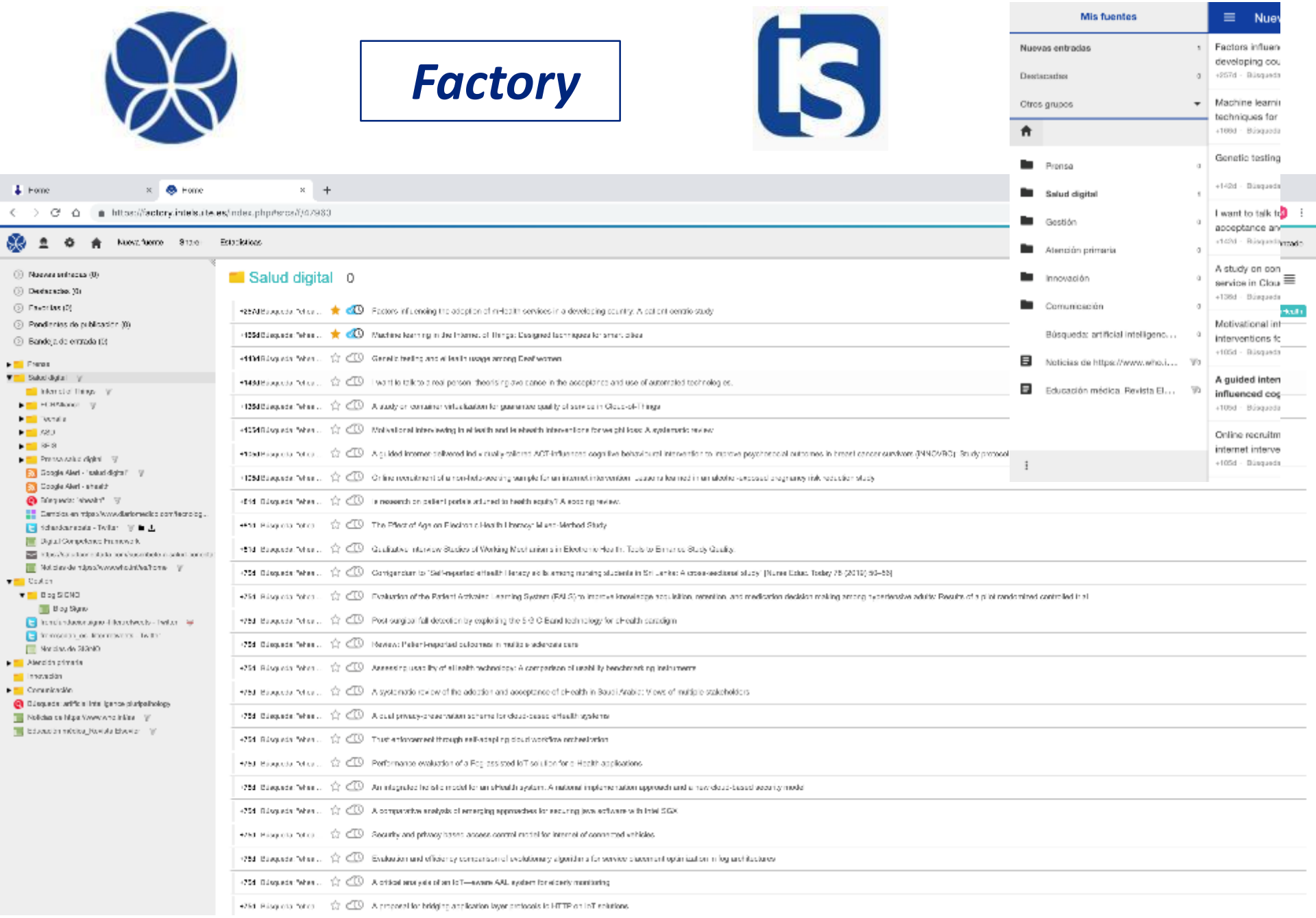
### INTELLIGENCE

- Machine learning & Artificial intelligence:
- Identification and reporting of sources
- Continuous source monitoring
- Adaptation to the frequency of publication of each source

### POWER

- Multi-language environment
- Automatic translation
- Unlimited fonts
- Unlimited filters
- Real-time font updates, 16 search engines
- No need for training or advice to include sources
- Deep Internet Search Engines
- Analyst Networks
- Information labelling
- Statistics on information sources
- Mobile App
- RSS feeds
- Automatic RSS generation

# Factory


Mis fuentes
Nuevas entradas
Destacadas
Otros grupos
Prensa
Salud digital
Gestión
Atención primaria
Innovación
Comunicación
Salud digital 0

# From information to intelligence

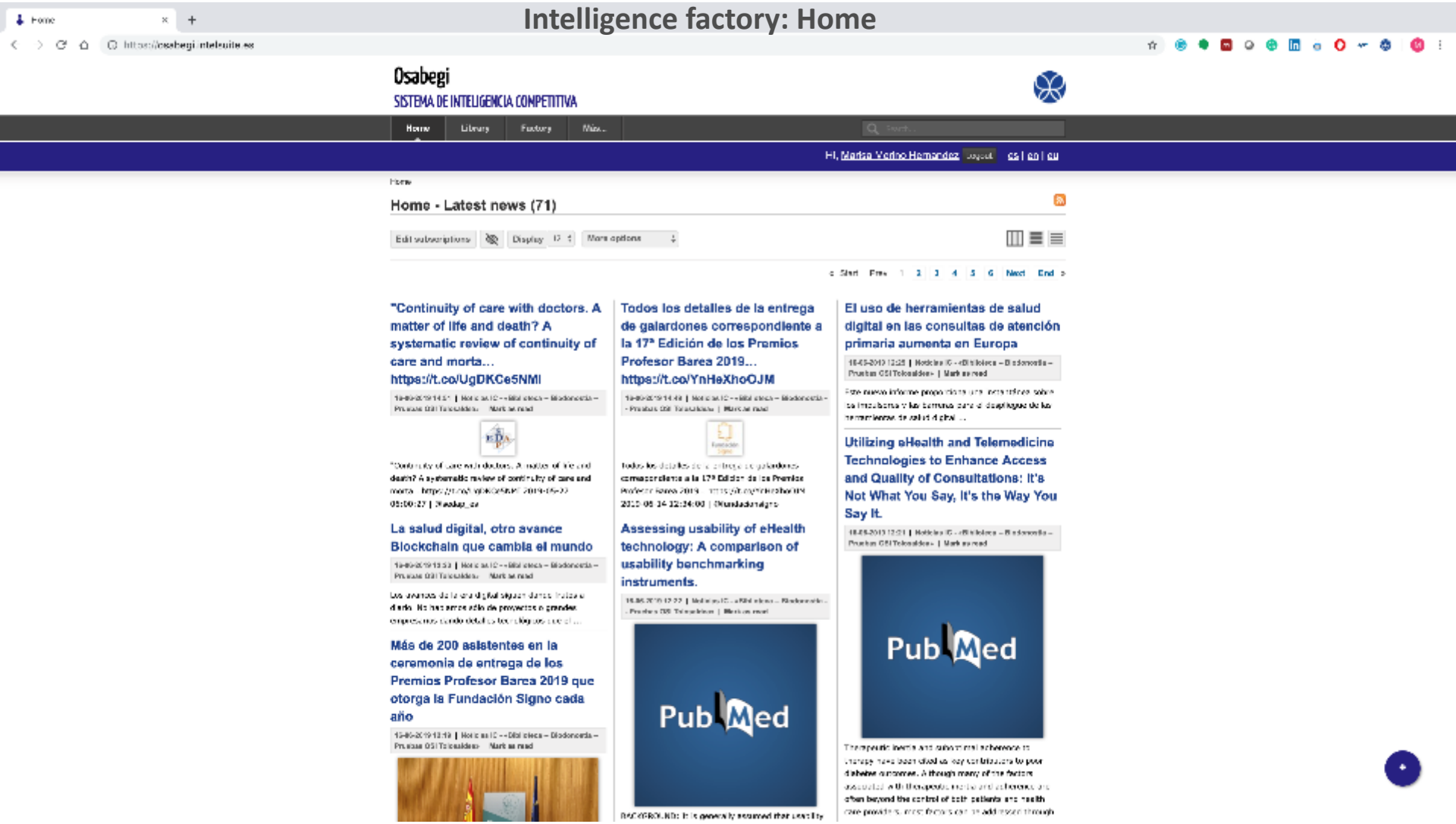
**The information must be interpreted by the analyst to make the link between information and decision making.**

## Intelligence analyst

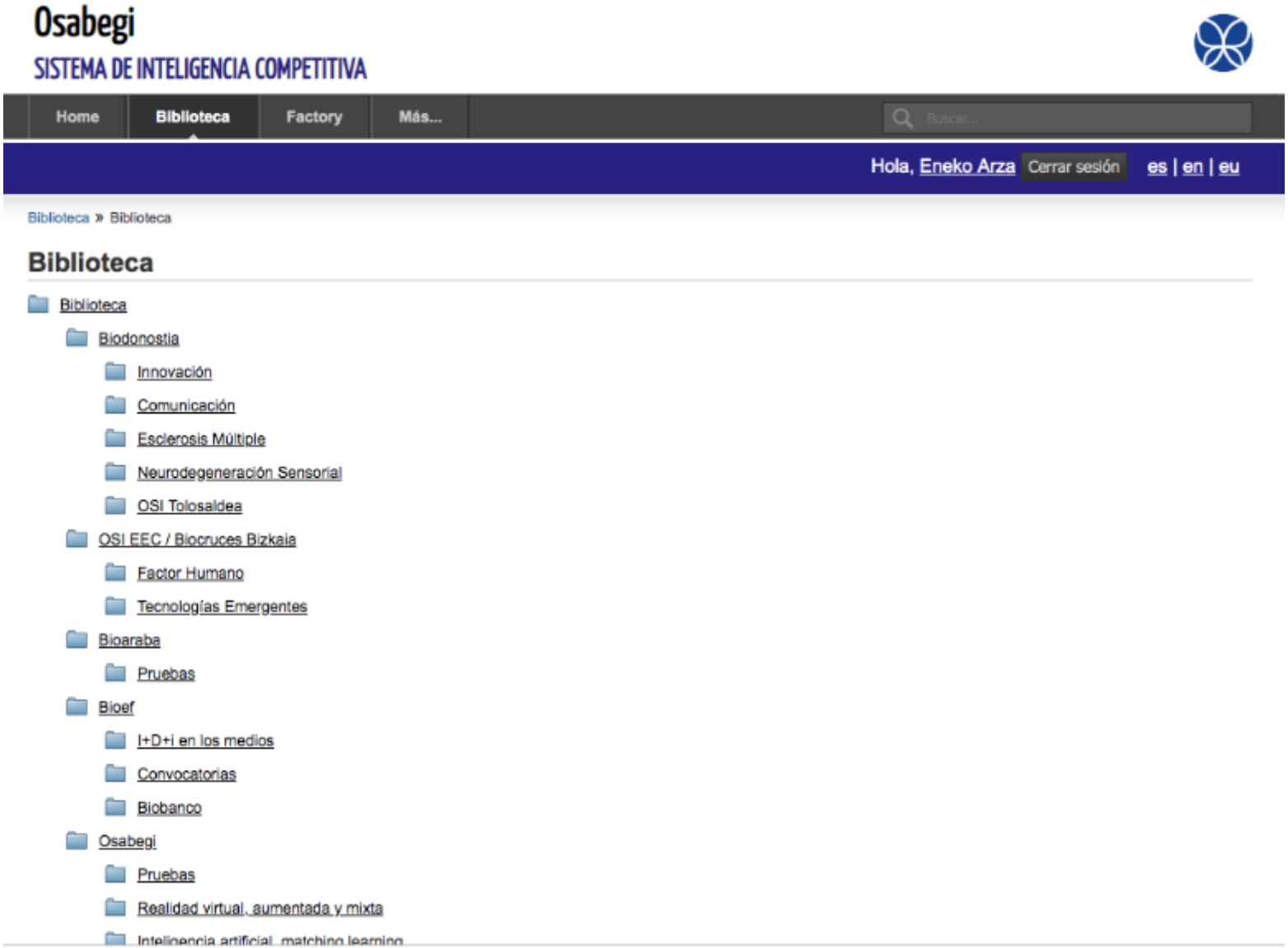
- Knowledge and review of critical surveillance factors
- Review of information sources
- Filtering sources
- Searching for information
- Sharing information
- Analysis and value of your knowledge
- Dissemination to create an ideal context for decision-making

## Intelligence application

# Osabegi: Competitive Intelligence



# Intelligence factory: Library structure



# Intelligence factory: Shared new

Osabegi

SISTEMA DE INTELIGENCIA COMPETITIVA

Home | Biblioteca | Factory | Más... | Buscar...

Hola, Eneko Arza Cerrar sesión es | en | eu

Biblioteca » Biodonostia » OSI Tolosaldea » Assessing usability of eHealth technology: A comparison of usability benchmarking instruments.

Junio

16

2019

Etiquetado como

salud digital

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Escrito por Marisa Merino Hernandez

Publicado en OSI Tolosaldea

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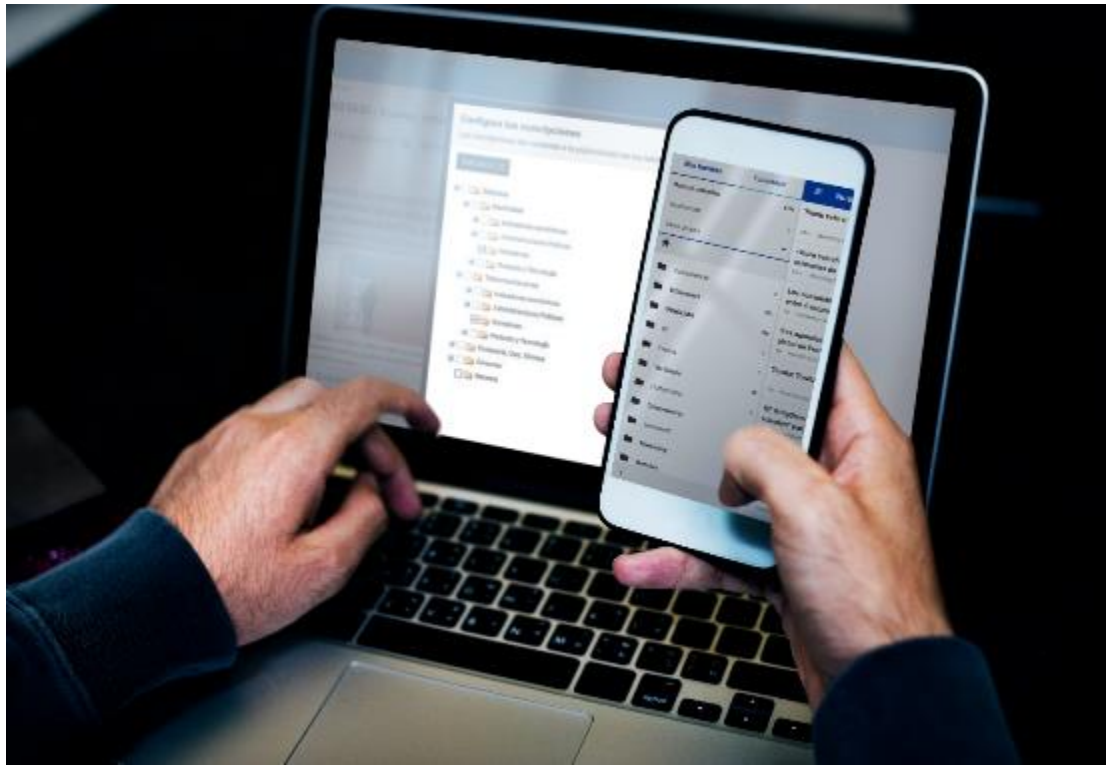
## Assessing usability of eHealth technology: A comparison of usability benchmarking instruments.

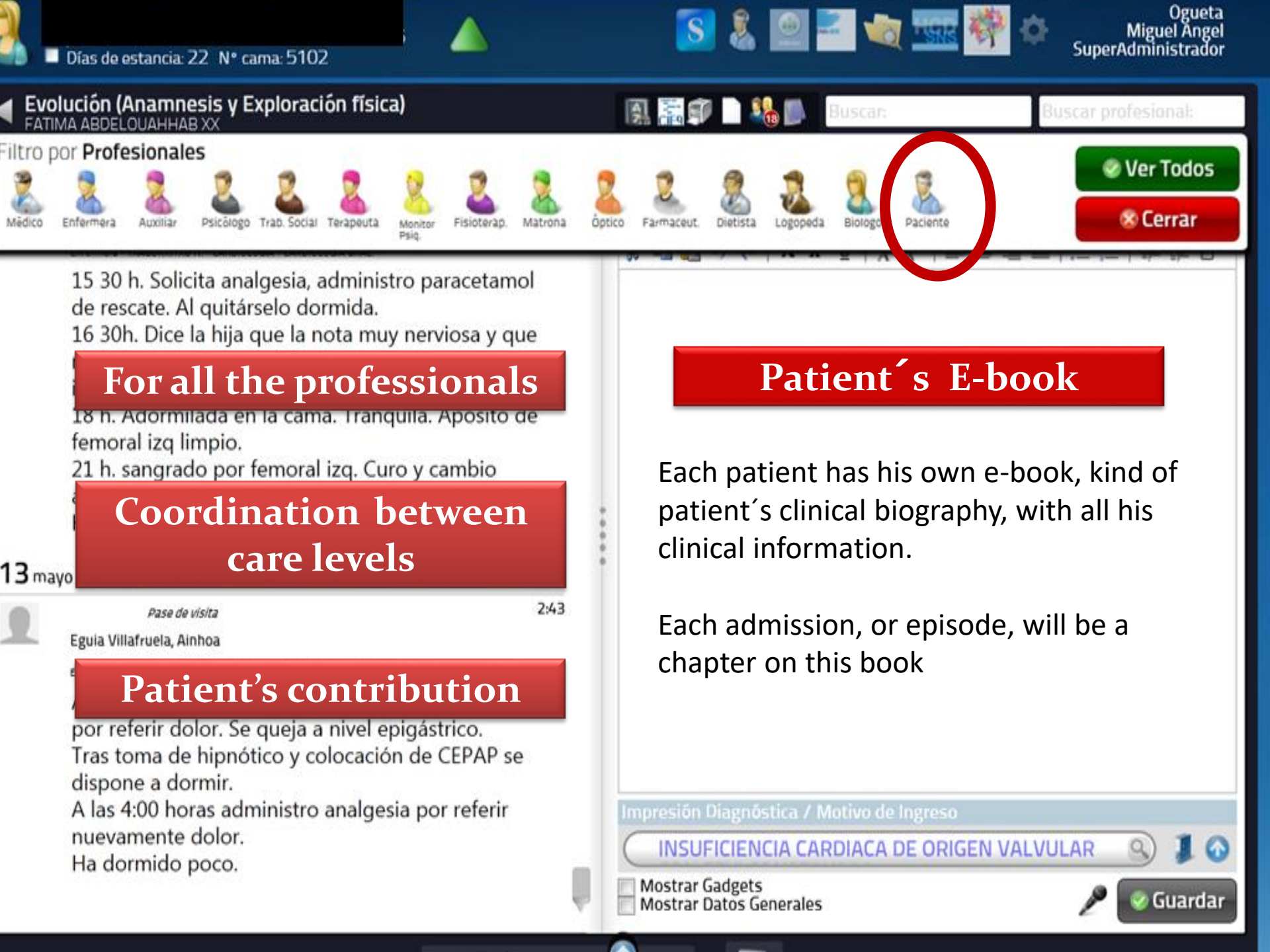
**BACKGROUND:It is generally assumed that usability benchmarking instruments are technology agnostic. The same methods for usability evaluations are used for digital commercial, educational, governmental and healthcare systems. However, eHealth technologies have unique characteristics. They need to support patients' health, provide treatment or monitor progress. Little research is done on the effectiveness of different benchmarks (qualitative and quantitative) within the eHealth context.**

# Saas + Mobile app



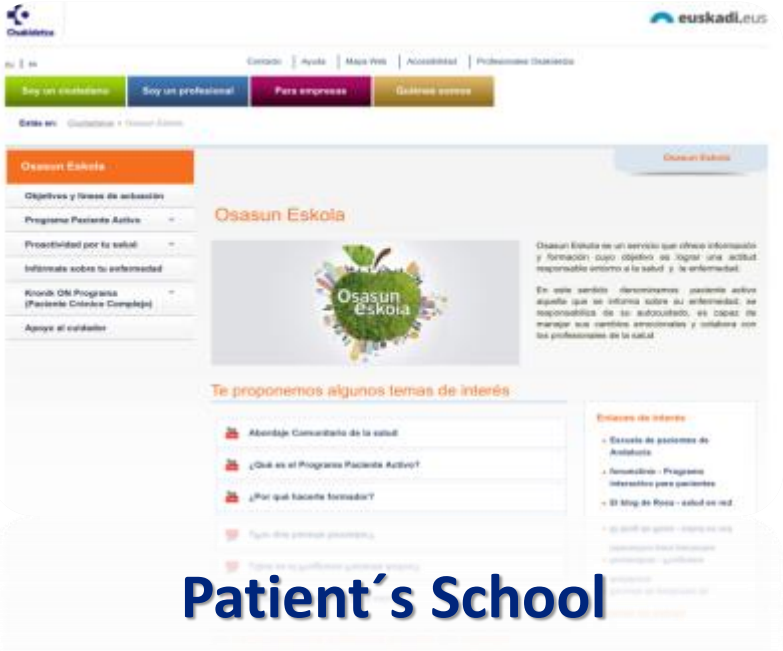
# 2. Communication and collaboration

2.1 Interacting through digital technologies B2
2.2 Sharing through digital technologies B1
2.3 Engaging in citizenship through digital technologies
2.4 Collaborating through digital technologies B2
2.5 Netiquette B1
2.6 Managing digital identity A1


Días de estancia: 22 N° cama: 5102
Ogueta
Miguel Angel
SuperAdministrador
Evolución (Anamnesis y Exploración física)
FATIMA ABDELOUAHHAB XX
Buscar:
Buscar profesional:
Filtro por Profesionales
Médico
Enfermera
Auxiliar
Psicólogo
Trab. Social
Terapeuta
Monitor Psiq.
Fisioterap.
Matrona
Óptico
Farmaceut.
Dietista
Logopeda
Biologo
Paciente
Ver Todos
Cerrar
15 30 h. Solicita analgesia, administro paracetamol de rescate. Al quitárselo dormida.
16 30h. Dice la hija que la nota muy nerviosa y que
For all the professionals
18 h. Adormilada en la cama. Tranquila. Apósito de femoral izq limpio.
21 h. sangrado por femoral izq. Curo y cambio
Coordination between care levels
13 mayo
Pase de visita
2:43
Eguia Villafruela, Ainhoa
Patient's contribution
por referir dolor. Se queja a nivel epigástrico.
Tras toma de hipnótico y colocación de CEPAP se dispone a dormir.
A las 4:00 horas administro analgesia por referir nuevamente dolor.
Ha dormido poco.
Patient´s E-book
Each patient has his own e-book, kind of patient´s clinical biography, with all his clinical information.
Each admission, or episode, will be a chapter on this book
Impresión Diagnóstica / Motivo de Ingreso
INSUFICIENCIA CARDIACA DE ORIGEN VALVULAR
Mostrar Gadgets
Mostrar Datos Generales
Guardar

# Tools for professionals

# Tools for patients and citizens




Patient´s School

Osakidetza

Apps

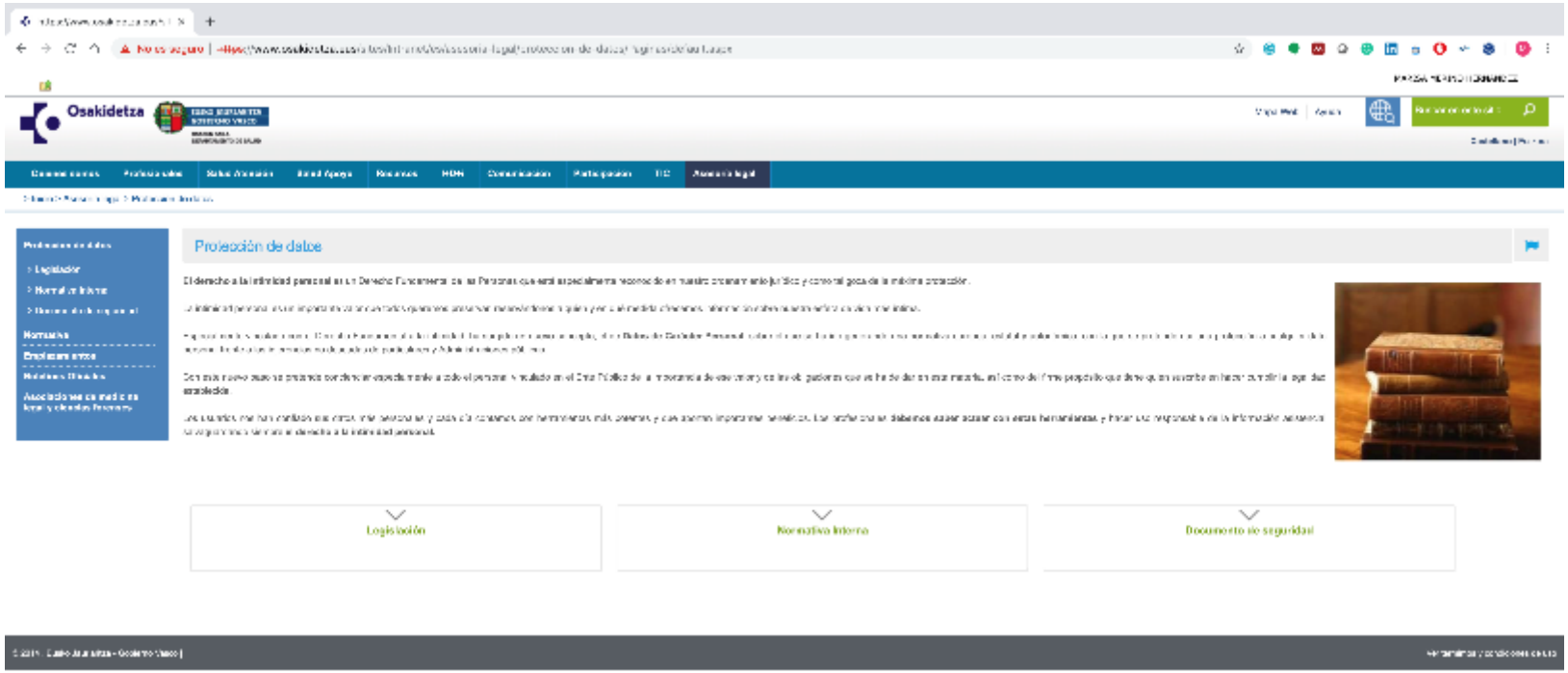
Personal Health Folder

# 3. Digital content creation

**3.1 Developing digital content B2**
**3.2 Integrating and re-elaborating digital content B2**
**3.3 Copyright and licences A2**
**3.4 Programming A2**

# 4. Safety

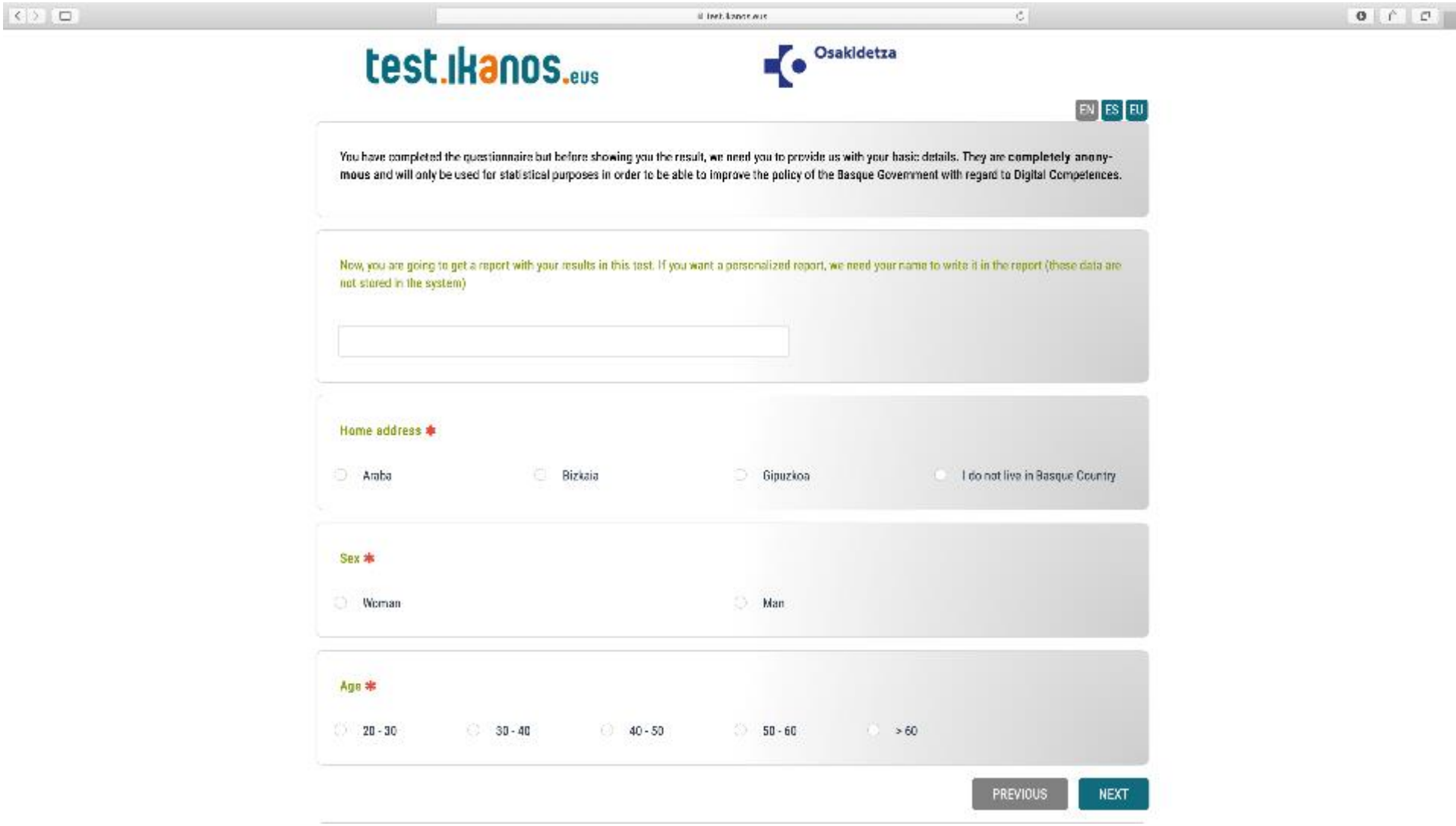
## 4.1 Protecting devices B1
## 4.2 Protecting personal data and privacy B2
## 4.3 Protecting health and well-being A2
## 4.4 Protecting the environment A2



# 5. Problem solving

**5.1 Solving technical problems A2**
**5.2 Identifying needs and technological responses B1**
**5.3 Creatively using digital technologies**
**5.4 Identifying digital competence gaps A2**

# Self questionnaire



# Knowledge net

Digital Health Congress
Challenges for progress
San Sebastián, 12-13 september 2019
ehealthdonostia.com