
Building the new smart EHR for Spain

openEHR Conference

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Spain. A decentralised country with a long tradition in health information exchange



Cobertura poblacional de HCDSNS en el SNS = 91%

Tipos de documentos

	HCR: Historia Clínica Resumida
	ICAP: Informe Clínico de Atención Primaria
	ICU: Informe Clínico de Urgencias
	ICA: Informe Clínico de Alta
	ICCE: Informe Clínico de Consulta Externa
	IRPL: Informe de Resultados de Pruebas de Laboratorio
	IRPI: Informe de Resultados de Pruebas de Imagen
	ICE: Informe de Cuidados de Enfermería
	IROPD: Informe de Resultados de Otras Pruebas Diagnosticas*
	EUPS: Resumen de Paciente de la Unión Europea*
	CP: Cobertura Poblacional

*No incluido en RD 1093/2010 - CMDIC.

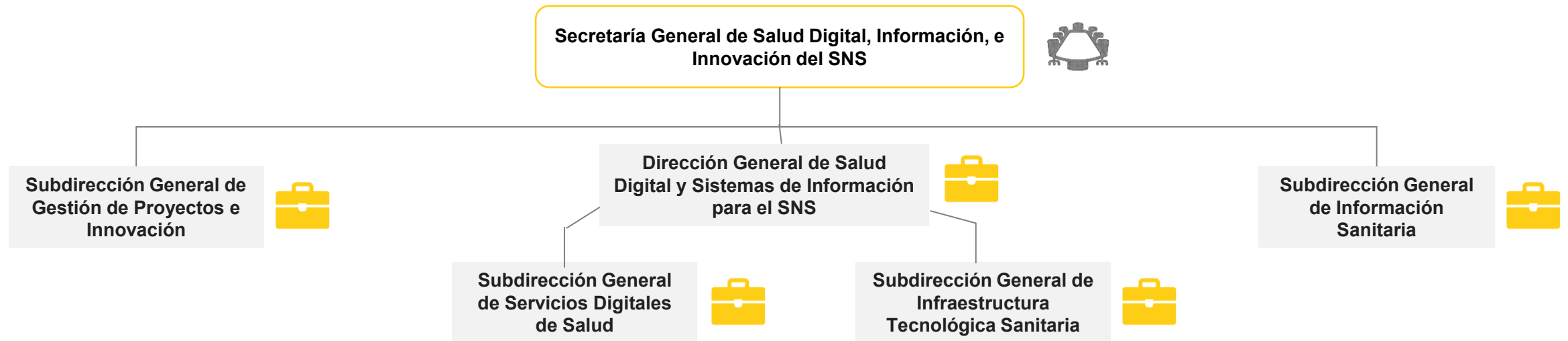
Source: <https://www.sanidad.gob.es/profesionales/hcdsns/contenidoDoc/situacionActualHCDSNS.htm>

Strategic framework and objectives

Within the framework of the Digital Health Strategy and the PERTE de Salud de Vanguardia, and as one of the objectives of the Action Plan for Primary and Community Care approved by the plenary session of the Interterritorial Council on December 15, the General Secretariat of Health Digital, Information and Innovation will develop the Digital Transformation Plan for Primary Care.

With the execution of these projects, valuable assets will be obtained for the Digital Transformation of the Spanish National Health System that will be presented to the Digital Health Commission and may be adopted as Spanish National Health System standards and implemented in any Health Service.

The Ministry, in collaboration with the Autonomous Communities, have been working together to define the map of interest for all the Health Services for the development of projects for the digital transformation of Primary Care.



Work groups and where are we?

Based on this Plan of Action-Digitalization, two main types of projects were established: Collaborative and individual. In order to address all the necessary projects and carry out a more appropriate and orderly distribution of the budget, 9 working groups have been defined.

Digital transformation

GT1: Longitudinal technologies

- Cybersecurity **Bal**
- Efficiency management **Mad**
- Datawarehousing **Mur**

GT2: HUMAN RESOURCES AND KNOWLEDGE MANAGEMENT

- Digital professional
- Collaborative and training platforms

Mad

Smart Health Centre

GT3: PATIENT PORTALS

- School of Patient and Health Promotion
- Intelligent demand management
- Teleconsultations

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GT4: DIGITAL HEALTH RECORD

- Smart Medical Record
- Epidemiological surveillance
- Social and health information integration

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GT5: DEVICE INTEGRATION AND MEDICAL IMAGING

- Medical imaging
- Medical devices

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Personalised care

GT6: TELEMONTORING

- Telemonitoring
- IoT integration

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GT7: CLINICAL DECISION SUPPORT

- Artificial Intelligence Services and Use Cases

CVa And

Leaders

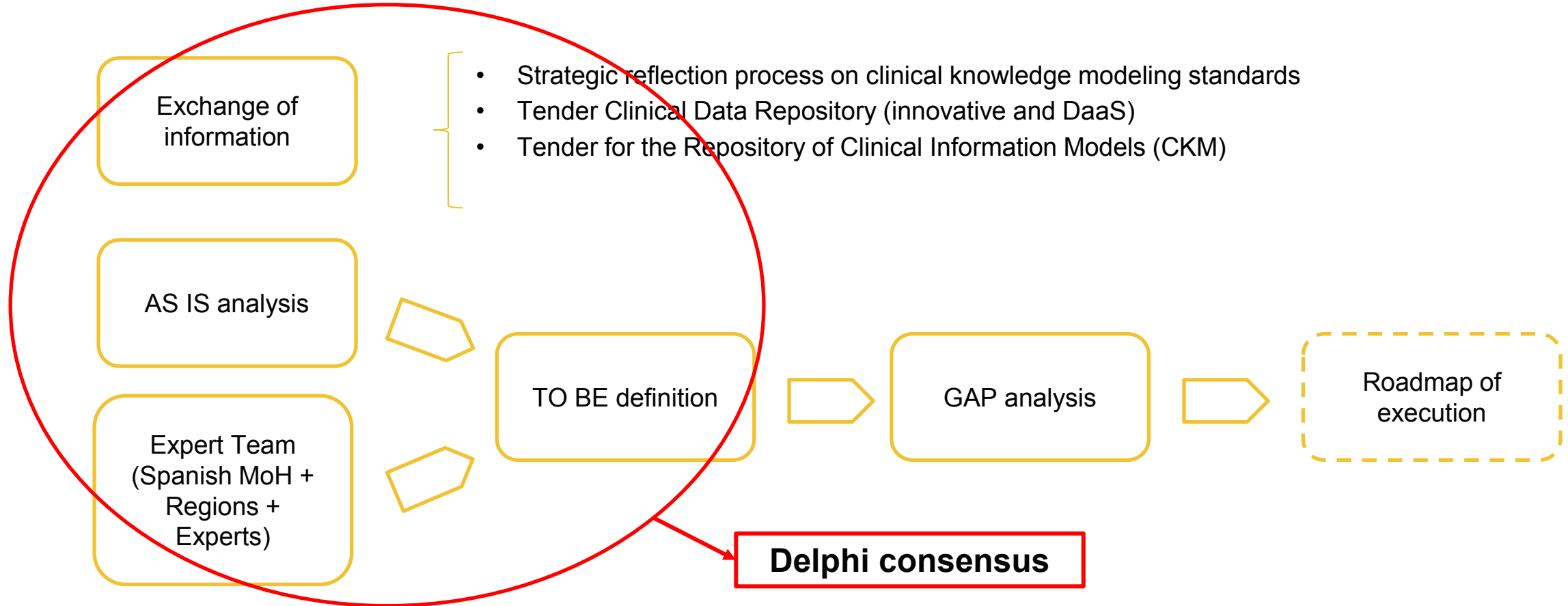
We are in a moment of paradigm shift in our information systems model that has to do with various conjunctural situations:

- Changes in the healthcare delivery towards longitudinal care models.
- Obsolescence of many of the current health information systems.
- Need for systematic use of health data.
- Moving towards patient-centred care.
- Guarantee the sustainability of health systems.
- National and European Health data spaces.
- Need to move towards semantic interoperability.
- Budget availability.

Electronic Health Record. Objectives

- Refoundation of our model of health information systems.
- Focus on clinical information management and progress towards semantic interoperability.
- Increased granularity of the information we share.
- Move towards a true longitudinal health record with a life vision.

Electronic Health Record. Future visión work plan



Delphi Survey. Methodological approach

A Delphi methodology will be used in order to establish levels of consensus among a panel of experts representing the entire Spanish territory.

The Delphi methodology helps us to:

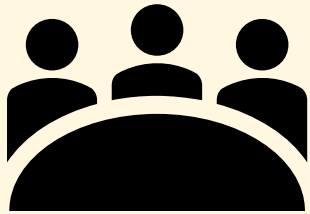
- Increase the knowledge of a subject from different points of view or,
- Reach a consensus regarding a matter according to the existing available information (1)

In our case, it is a question of reaching a consensus on the characteristics that the future model of health information technologies should. In this process, the different points of view of experts in the field will be considered and a consensus will be reached by conducting a survey/list on the different areas of interest.

1. <https://www.elsevier.es/es-revista-investigacion-educacion-medica-343-articulo-descripcion-usos-del-metodo-delphi-X2007505712427047>

Delphi Survey. Methodological approach (2)

Driving group



1. Define

Experts from the Spanish regions in health information technologies and interoperability

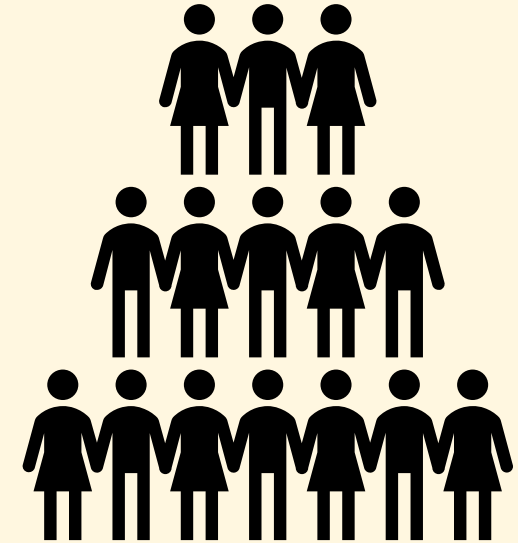
4. Assess and propose



Survey Supporting documents

Panel of experts

2. Accept to be part



3. Answer

Experts in health information technologies, standardisation organisations and service provider organisations

Composition:

- Expert members in interoperability and health information systems

Role

- Leadership and coordination during the tasks described

Tasks:

- Approval of the work/study protocol:
 - Number of members of the expert panel and composition
 - Consensus rules for the subsequent evaluation of the results (threshold of results for their subsequent evaluation, etc.)
- Approval of the questions included in the survey
- Propose members for the expert panel
- Select the base information to share with the panellists
- Evaluation and interpretation of the results
- Drive recommendations based on the results of the survey



Delphi Survey. Panel of experts

Composition:

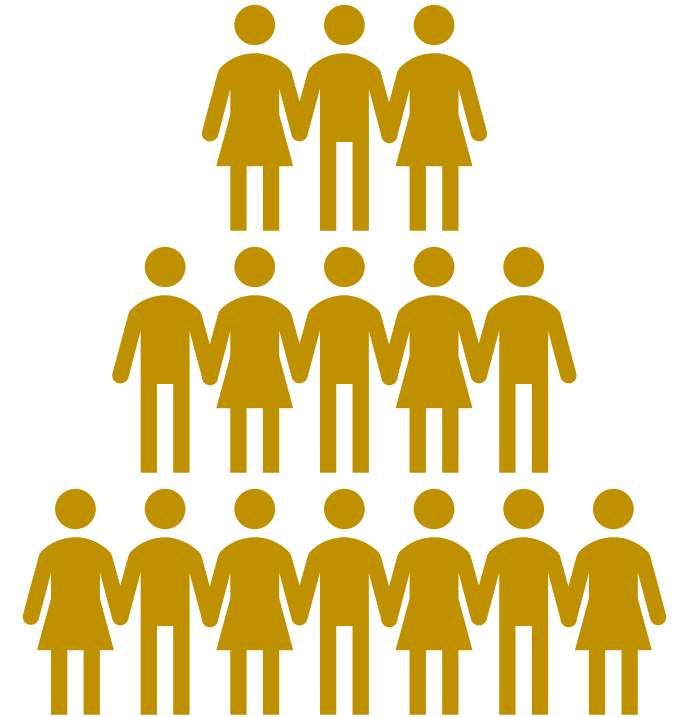
- Members with responsibility in the field of health information technologies, interoperability and standardisation
 - Representatives of the health systems of the Spanish regions
 - Scientific societies in medical informatics
 - Standardisation bodies
 - Health system provider representatives

Role

- Participate in the survey process

Tasks:

- Accept participation using the participation document provided
- Participate in pre-response training activities
- Answer the survey in the required time





Justification of need:

- Obsolescence
- Fragmentation
- Limited communication between systems
- ...



Functional characteristics:

- Integrated care
- Patient-centric
- ...



Technical characteristics:

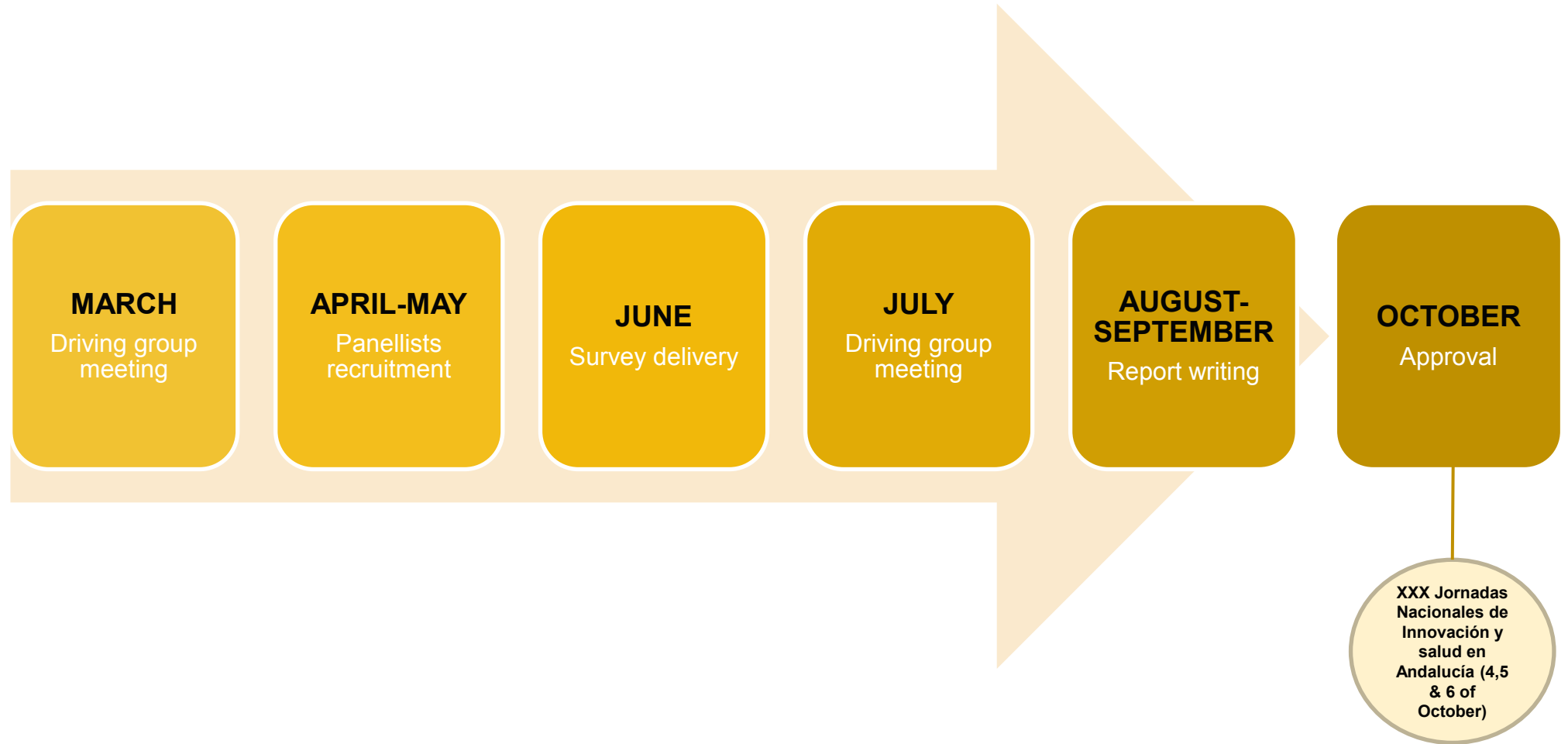
- Dual model
- Clinical data repository
- ...



Governance model:

- Clinical consensus
- Federated governance model between the Spanish MoH and the regions
- ...

Delphi Survey. Phases and scheduling





Composition:

- Carolina Abril – Ministerio de Sanidad
- Pedro Arias – Centro Nacional de Epidemiología
- Diego Boscá – Veratech
- Isaac Cano – Hospital Clínic de Barcelona
- Carlos Castresana – Ministerio de Sanidad
- Belén Delgado – Ministerio de Sanidad
- Santiago Frid – Hospital Clínic de Barcelona
- Joaquín Garrucho – Servicio Andaluz de Salud
- Bidatzi Marin - Servicio Andaluz de Salud
- Laura Moral – Servicio Catalán de la Salud
- Adolfo Muñoz – ISCIII
- Mario Pascual - ISCIII
- Miguel Pedrera – Hospital XII Octubre
- Santiago Pérez - ISCIII
- Jorge Rangil – Ministerio de Sanidad
- Fran Sánchez – Servicio Andaluz de Salud
- Pablo Serrano – Hospital XII Octubre
- Lluís Valle – Servicio Catalán de la Salud
- Elena Vanessa – Centro de coordinación de Alertas y Emergencias Sanitarias
- Jordi Piera – Servicio Catalán de la Salud

How do we convince our ecosystem? Recipe for success

- The system needs to be mature
- Strong leadership
- Involve all the relevant stakeholders
- What is the problem we want to solve? Be ready to ask the nasty questions
- Be brave

Thank you!

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Strategy for Catalonia

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