

## Title: Catalonia's Journey Toward Person-Centric Digital Health

Speaker: Dr Jordi Piera-Jiménez, Director of the Digital Health Strategy for Catalonia, Catalan Health service

## Abstract:

Over the past 30 years, Spain has undergone a remarkable transformation in health information technology, with Catalonia emerging as a pioneering region in digital health innovation. This presentation chronicles the evolution from early electronic health records to today's sophisticated open platform ecosystem, highlighting the strategic shifts that have redefined healthcare delivery.

Beginning with the digitalization wave of the mid 1990s, Spain's journey illustrates three distinct phases of health IT evolution. The first phase focused on transitioning from paper to electronic systems within individual healthcare providers. The second phase emphasized cross-provider integration through shared electronic health records and federated platforms. Today, we are entering the third wave: a knowledge-driven, open platform paradigm that prioritizes person-centric, longitudinal care that extends beyond hospital walls to encompass prevention and community-based health interventions.

Catalonia's experience demonstrates how a unified health system with 8 million inhabitants successfully navigated the challenges of fragmented healthcare delivery across diverse providers. Key milestones include the implementation a comprehensive electronic prescription system (2003), the implementation of Shared Electronic Health Record (2008), and the recent adoption of the open platform paradigm. Central to this transformation has been a shift toward preventive care models and community health approaches, recognizing that sustainable healthcare requires addressing health determinants at the population level rather than merely treating disease. A distinctive feature of Catalonia's approach has been its commitment to participatory governance and evidence-based policy making. This participatory methodology ensures that technological solutions address real-world clinical needs while maintaining democratic legitimacy in public health policy decisions.

The presentation will explore how Spain is positioning itself within the European Health Data Space (EHDS) framework, leveraging standardized knowledge models and FAIR data principles to enable unprecedented opportunities for research, quality improvement, and innovation. Central to this transformation is the shift from technology-driven to clinically-led initiatives, with multidisciplinary teams developing reusable clinical knowledge artifacts that ensure semantic consistency across the healthcare ecosystem.

Catalonia's open platform approach creates a competitive marketplace, fostering a platform economy where innovation thrives while maintaining data sovereignty and patient privacy. This model enables the systematic utilization of health data for population health management, predictive analytics, and evidence-based policy making. The integration of community health data and prevention indicators within this platform creates unprecedented opportunities for addressing health inequities and implementing targeted public health interventions based on robust scientific evidence.

The presentation concludes with practical insights for other health systems embarking on similar journeys, emphasizing the critical importance of clinical leadership, participatory governance, and standards-based development in achieving sustainable digital transformation.

## A short presentation of you / your research ¼ page

Jordi Piera-Jiménez, PhD, MBA, FHIMSS leads Catalonia's Digital Health Strategy at the Catalan Health Service, where he orchestrates the transformation of healthcare delivery for 8 million citizens across northeastern Spain. With dual training in Computing Science Engineering and Business Management from



Autonomous University of Barcelona, complemented by an MSc in Telemedicine, PhD in Medical Informatics, and MBA, Jordi bridges the technical and strategic dimensions of health system transformation. As Principal Investigator of the DS3 (Digitalization for the Sustainability of the Healthcare System) Research Group, his research focuses on integrated care models, semantic interoperability, implementation research, and evidence-based evaluation of digital health interventions. Jordi serves as a lecturer at universities both locally and internationally, and has extensive experience leading European Union-funded digital health projects.