

Interoperability of Digital Health Services: Telemedicine and Electronic Health Record in Italy

Sponsored by



Marco Meta





The role of AGENAS in the PNRR (National Recovery and Resilience Plan)





Implementing Subject for PNRR Investments

In reference to Mission 6, Component 1, AGENAS has been appointed as the implementing agency for investments.

- Artificial Intelligence
- Transparency Portal
- Telemedicine
- Intermediate Body for the Provision of Managerial Training Courses

National Agency for Digital Health Agenzia Nazionale per la Sanità Digitale – ASD

Ensuring National Uniformity and Efficiency in the Implementation of Digitization Policies.

Ensuring National Uniformity and Efficiency in the deployment of Implementation Policies.

Ensuring National Uniformity in the Delivery of Healthcare Services, including Telemedicine Solutions.

National Program for HTA of the Medical Devices

Development of the methodological guidelines that will be applied for the production of multidimensional technical evaluation reports in the National Program for Health Technology Assessment (HTA) of Medical Devices.



Sub-Investment 1.2.3.1 – National Telemedicine Infrastructure (INT)



General Objective

Create a **national infrastructure - the Telemedicine Platform -** to ensure that the delivery of healthcare services through telemedicine occurs more **equitably** and **uniformly** across the national territory.

This mode of healthcare service delivery is intended to complement the traditional in-person mode but, in line with the clinical needs of the patient, can be used within **regional healthcare services** throughout the care pathway, with a particular focus on chronic patients.

The Telemedicine Platform, which will serve as the governance body for telemedicine services provided at the regional and company levels through the so-called enabling services, must also integrate with the healthcare digital ecosystem and the Electronic Health Record (Fascicolo Sanitario Elettronico - FSE).

Respecting territorial diversities and specificities, telemedicine solutions must adhere to technical, organizational, and functional standards that ensure consistency across the entire national territory.

Functions of the Telemedicine Platform (Enabling Services)

- Governance and Validation of Telemedicine Solutions
- Clinical Workflow
- Coding and Terminology Standards
- Evaluation of Usage Outcomes

Acquisition Mode of the Platform

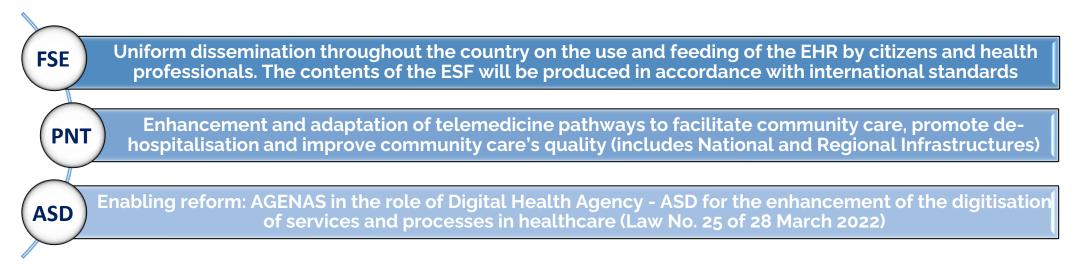
Public-Private Partnership (PPP) Procedure in accordance with Articles 180 and 183, paragraph 15, of Legislative Decree of April 18, 2016, No. 50.



Digital Transition in the SSN (National Health Service)



Standardising opportunities and standards across the country



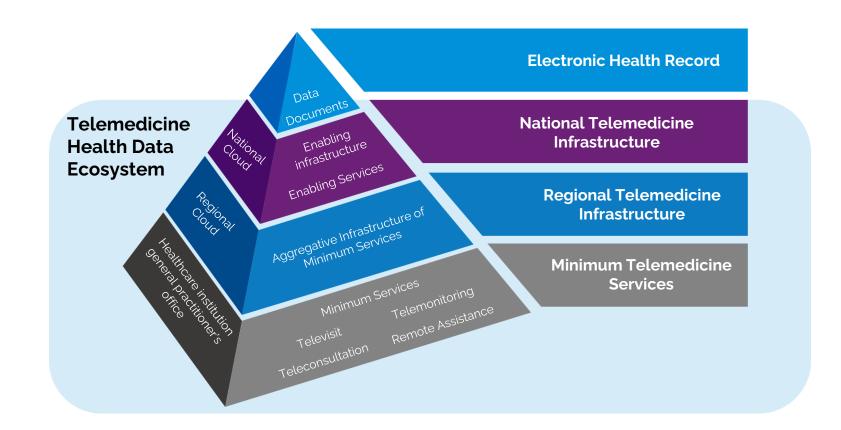
The EHR and Telemedicine platforms are mutually interconnected and compete in implementing clinical processes, technology governance, data collection and provision of services to users and professionals.

*Source: 'Telemedicine Platform and ESF Ecosystem - Contact points and connection between the two projects' published on AGENAS website



Digital Health and Telemedicine





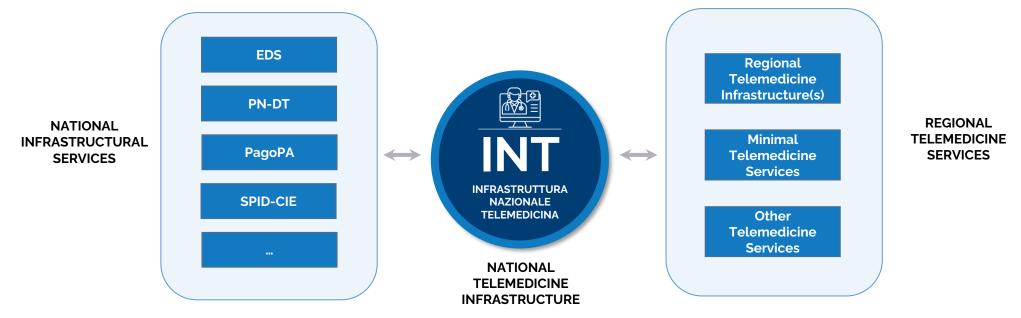


National Telemedicine Infrastructure (INT)





Its primary goal is the governance and monitoring the use of Telemedicine services through the integration with the Regional Telemedicine Infrastructures (IRT) responsible to provision of health services.



INT guarantees **maximum interoperability** with central systems envisaged for the digital transition process of the services provided by the Public Administration.



Health Data Ecosystem (EDS)

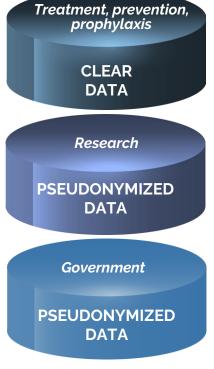
The Health Data Ecosystem (EDS) is the main source of the Telemedicine platform. This system, powered by the Gateway (GTW), is the archive of all health data coming from company systems (in FHIR format).



The National Telemedicine Infrastructure, through the interoperability layer, withdraws/receives different types of data from the EDS system respecting the separation principle.

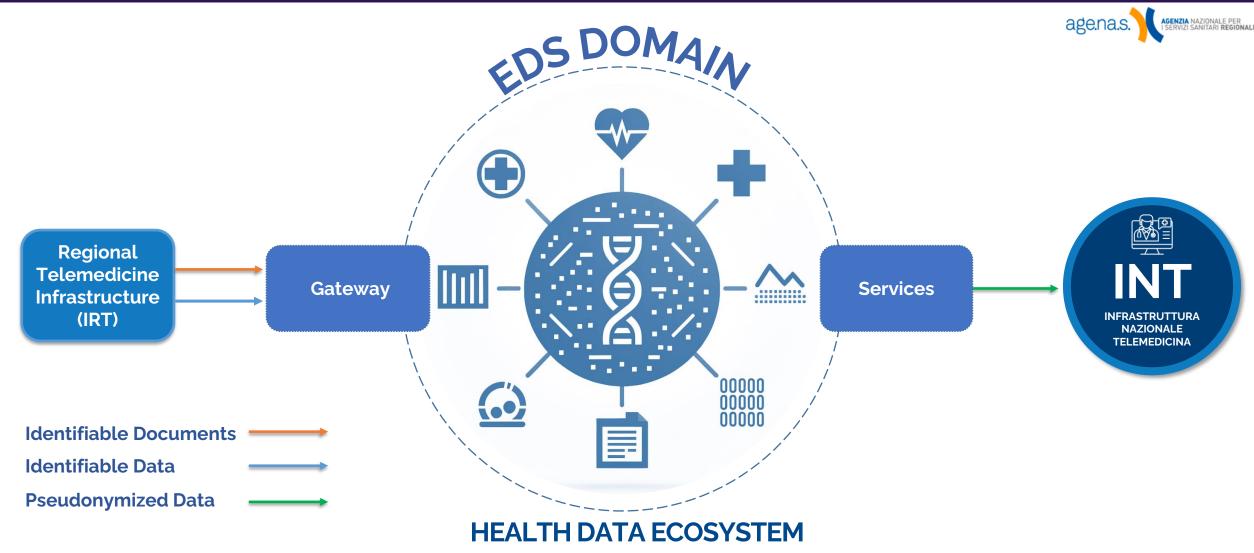








Telemedicine Data Flow



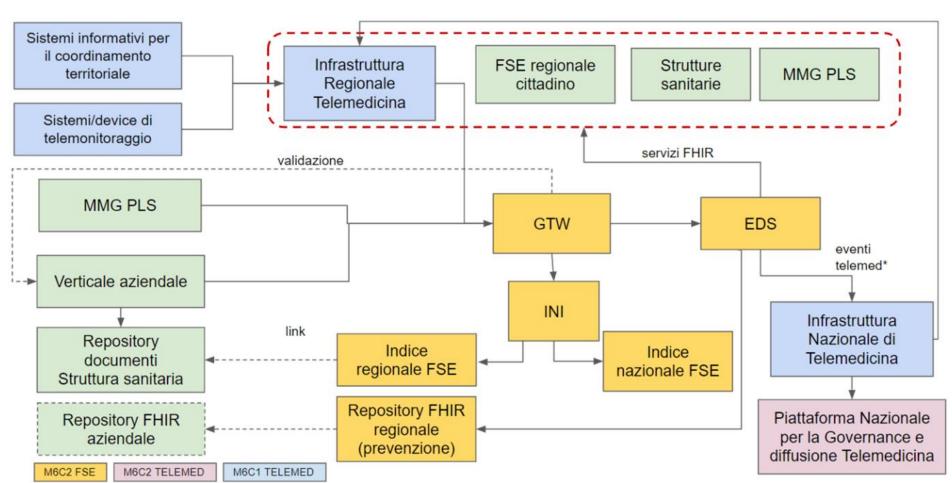


Telemedicine and EHR: integrated logical model (1/2)

age.na.s. AGENZIA NAZIONALE PER I SERVIZI SANITARI REGIONAL

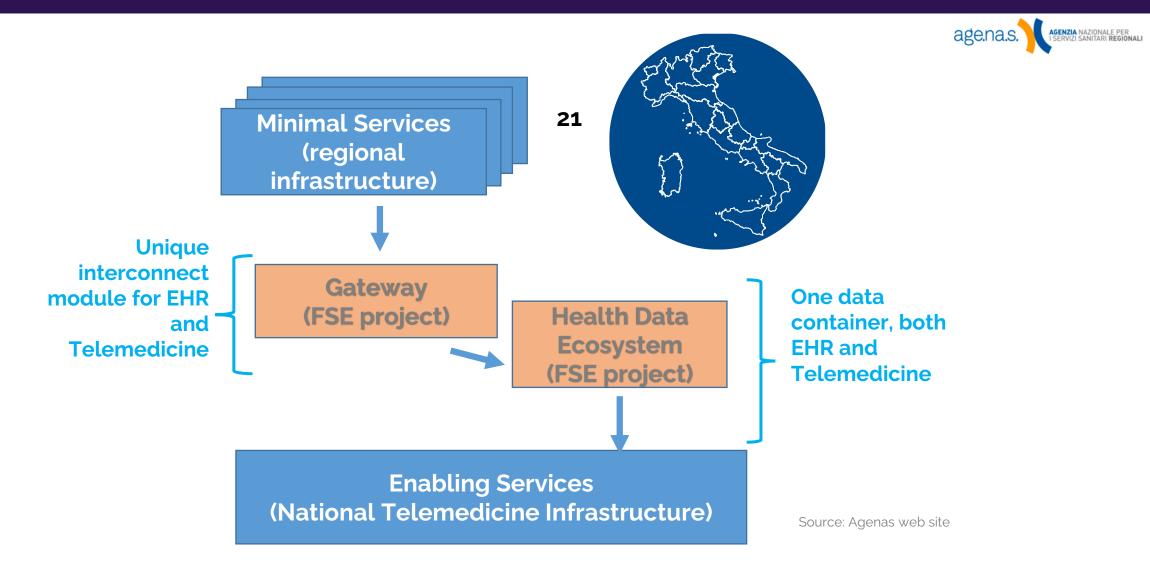
Main goals:

- module (GTW) of EHR to allow data communication between Regional and National Telemedicine infrastructures.
- To enable a single container Health Data Ecosystem (EDS) for every kind of data, including those related to Telemedicine



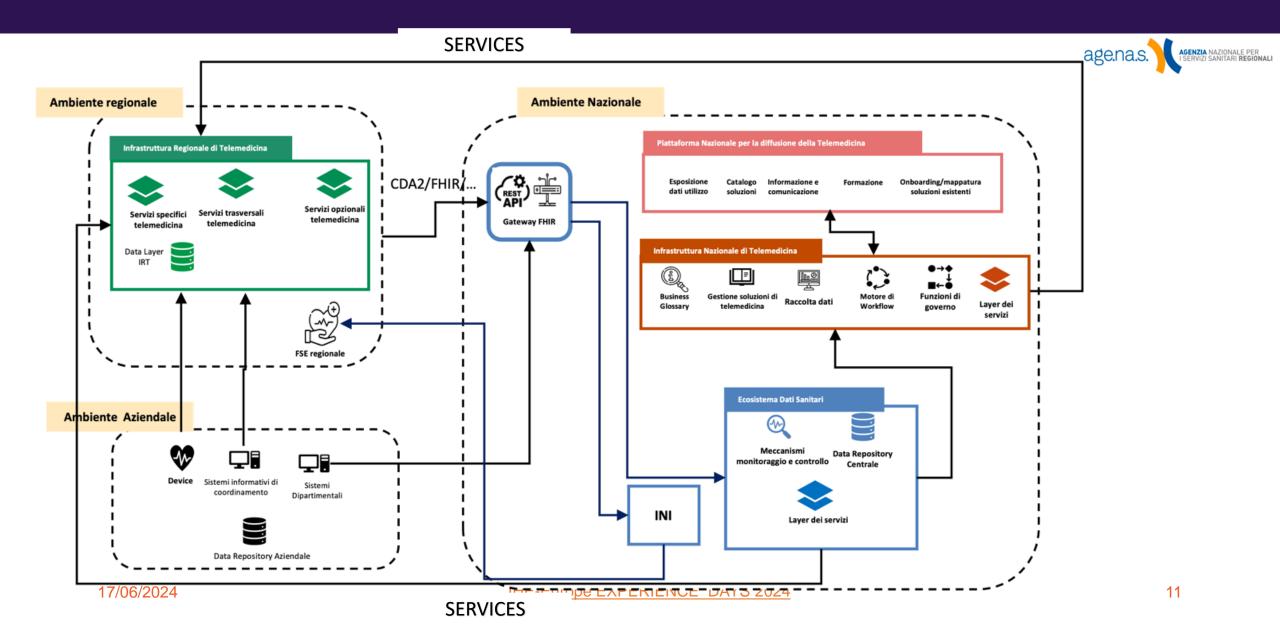


Telemedicine and EHR: integrated logical model (2/2)





Telemedicine and EHR: architecture overview





Technological drivers - summary

- ✓ Interoperability
- ✓ Cloud native
- ✓ Micro-services architecture
- ✓ Containerization
- ✓ Event management
- ✓ Mobile oriented
- ✓ Usability and Accessibility



Thanks for your attention!



Marco Meta - email: meta@agenas.it