Galicia – Zagreb (IANUS)

Twinning overview

Originator:	**Adopter:**	**Innovative Practice:**
Consellería de Sanidade de Galicia, Galicia	Health Centre Zagreb-Centre, City of Zagreb	*IANUS*

Innovative Practice Description

The implementation of an electronic medical history system is one of the strategic axes, which have been agreed upon by the Health Ministry and the autonomous communities in general; this is for the development of ICT systems applied to health care. What has allowed *IANUS* to reach one of its goals is the ability to provide a powerful and effective tool for managing clinical information, having a single model of access to information through a web application. It is about a single shared medical history, providing integrated care to patients when the integration of care processes and the continuity of care between primary and specialized care in any SERGAS centre is improved, minimizing testing and allowing shared management of the same.

The information is available in an integrated, simple way, which avoids the separation of information which can be generated from any patient at any level of health care and being completely accessible to authorized healthcare professionals, also including the image that healthcare provides. This , in turn, improves patient safety, allowing for better diagnosis and for tailored and individualised treatments.

Through *IANUS*, electronic prescriptions and dispensations of all medication throughout all of the Galician Public Health System is guaranteed. All the community pharmacies are connected to *IANUS* for dispensations. This is a major benefit for the population and mainly for the elderly population, which allows for a unique and extraordinary comprehensive amount of information on pharmacotherapy resource consumption, adherence to treatment, drug interactions and even an additional element to stratify the population. In addition, *IANUS* bears the supply and the pharmacotherapeutic care to over 8,000 patients in nursing homes, which is done from the hospital pharmacy service. Moreover, *IANUS* allows effective and efficient management of the patient care program for poly-pharmacy patients in Galicia.

Of a population of 2,781,498 people in Galicia, *IANUS* is accessible to 18,000 Galician Health Service System users, 2,700,000 patients who can access their record via internet and indirectly for 5,000 pharmacists in pharmacies. Currently 100% of health centres and hospitals of Galicia and 100% of pharmacies are connected.

Link to the EIP on AHA Repository of innovative practices:

https://ec.europa.eu/eip/ageing/repository/electronic-medical-record-system-*IANUS*-improves-regional-health-care-galicia_en

Innovation Scope:

- Regional/national EHR systems and summaries
- Regional ePrescription system

Innovation Type:

- **Knowledge exchange and training**

City of Zagreb Reference Site engaged in two complementary twinning actions with Andalusia and Galicia Reference Sites. Study visits to originating reference sites were organized. Twinning action provided insights into the Galician health systems' organisational details, technical aspects of Electronic Health Record, health-related digital solutions and the *IANUS* system. Study visit reports were sent to important stakeholders/decision makers in Croatian health system and workshops with experts from Galicia RS are planned to facilitate implementation/scaling-up of innovative digital solutions.

- **Partial adoption**

Exchanged knowledge and experience from both Andalusian and Galician Reference Sites fostered development of pilot projects using innovative digital solutions. Brief description of the existing patient portal *Zdravlje.Net* and pilot-projects that resulted from twinning actions is provided below.

Zdravlje.Net is a secure web application that enables patient-GP communication in real time. It features prescription requests, message exchange, booking appointments and delivery of specialist's findings or lab results.

The communication itself is effortless for both, but especially for the GP office – no additional administration is needed aside regular work within the GP's application for primary healthcare. Both patient and GP receive instant notifications about new messages or content from the opposite party.

The GP initially defines the feature permissions for his patient and which medicine is available for therapy renewal (i.e. therapies for chronic illnesses). Afterwards, content for the enabled features is added or removed by one click by the GP in his own application.

The patients automatically receive feedback about their prescription requests when the GP accepts or refuses the request. Messages and appointment reasons from the patient are categorized and displayed to the GP. All communication and request history by the patient is visible and stored within the patient's health record.

Zdravlje.Net benefits both patient and doctor: fewer unnecessary visits or calls to the GP, no crowded waiting rooms or busy communication channels, better care for patients with chronic diseases, etc.

Project "Dnevnik Zdravlja" (*Health Diary*) is an upgrade on the existing web application *Zdravlje.Net*.

Health Diary is a new module consisting of three sections: weight, blood pressure/heart rate and glucose.

Patients using the *Health Diary* can input their vital signs (blood pressure, heart rate), glucose levels (with defined intake moments – on an empty stomach, before meal, after meal), height/weight values and waist width. Useful information is displayed to the patient based on the input data (warnings for elevated/low values, BMI, etc.).

The measurement data is momentarily available in the GPs application (within the patient's health record).

With the project "Dnevnik Zdravlja" (*Health Diary*) GPs can track their patients' health on a daily basis and react immediately if the values are concerning (call the patient in for a check-up, refer him to a specialist) or even use it as a prevention tool to engage a "healthy" patient to keep track of his own health and quality of life.

Project "Obavijesti za pacijente" (*Patient group messaging*) is also an upgrade on the existing web application *Zdravlje.Net* - it enables the GP to send a message to a group of his patients. The GP uses his primary healthcare application where he can define patient groups he wants to send the message to. The selection criteria are multi choice – meaning GPs can select one or more criteria to filter out patients. The criteria include: male, female, age group (from-to range) and chronic illnesses (one or more). *Zdravlje.Net* users (patients) are filtered according to the set criteria and the GP can easily send out a message to all targeted patients (i.e. remind older chronic patients about the yearly flu immunization). Patients receive a notification about new messages in the system and the message is visible in their *Zdravlje.Net* inbox.

Project "Komunikacija PZZ-SKZZ" provides easy e-Consultations for GPs with specialists

(cardiologists, psychiatrists, etc.) via two-way communication between both, starting with an e-Consultation request from the GP.

The goal of e-Consultation requests is to gather specialist feedback about the patient's condition without sending the patient in person to the specialist. The specialist can then advise the GP about further steps based on the patient's condition.

The GP sends a structured e-Consultation requests towards a specific field of medicine, healthcare institution or directly to a specified specialist. The request is generated within the GPs primary healthcare application using the patient's health record. The GP selects all patient data he deems important and adds it to the request. He can also request an expedited review of the request because of some medical urgency.

The request is visible within the new web application for GPs, *Zdravlje.Net PRO*. The specialist can then accept or decline requests (with explanation why it was declined). All data sent from the GP is visible to the specialist. The specialist or GP can also request or provide additional information, if needed, about the patient over a messaging service connected to the request. Upon reviewing all information the specialist can send out his findings/results.

AHA Action Group:

- ✓ A1. Prescription and adherence action at regional level
- ✓ B3. Replicating and tutoring integrated care for chronic diseases, including remote monitoring at regional level

Twinning Objectives:

The objective of the twinning is the transfer of knowledge on how to implement and scale-up new eHealth services.

The twinning will allow knowing the technical and organisational aspects of *IANUS*, the Galician Electronic Medical History system. The knowledge and best procedures to accomplish the main interests from City of Zagreb and to further develop pilot-projects will be transferred. The twinning will allow knowing technical and organisational aspects that facilitates the implementation of a powerful EHR. The best practices of Galicia will be shared, which has an integrated EHR not only accessible for health professionals (Primary care, Secondary care) but also for patients through a secure online access.

During twinning actions with (Galicia and Andalusia) 4 areas that could be improved were identified:

- Primary care Patient Inflow Management
- Care for complex patients
- Cross-specialty HCP communication
- Mobile patient portal (m-Health setup)

Pilot projects improving those areas are currently in different stages of completion.

Sessions and workshops in the City of Zagreb Reference Site with important national level stakeholder representatives and Reference Site teams are planned.

Dedicated workshops for education of personnel in eHealth solutions are planned and carried out.

Twinning end result:

Twinning resulted in pilot-projects/innovative practices implementation that can affect population covered by Health Centre Zagreb-Centre (133.000 citizens). If proven successful innovative practices are ready to be scaled-up regionally (790.000 citizens) and nationally.