Andalusia – Zagreb (Diraya)

Twinning overview

Originator: Regional Ministry of Health of Andalusia, Andalusia	Adopter: Health centre Zagreb – Centar, City of Zagreb	Innovative Practice: Diraya

Innovative Practice Description

The Andalusian Public Healthcare System has adopted corporate information systems, accessible to all health professionals, as a strategy to cater for citizens' mobility and the participation of many multidisciplinary teams of professionals involved in healthcare processes. The AeHS (Diraya) helps health professionals in their daily work, integrating all health information for each patient in one single electronic health record, available when and where needed within the Andalusian Public healthcare network, at all levels of care: primary healthcare, outpatient specialised care, emergencies and inpatient care. Community pharmacies (private offices) also access the medication record for dispensing the e-prescribed drugs. Reduction of administrative tasks has contributed to its use. Diraya facilitates patients' care continuity and enables access to all healthcare services available. Of interest are the ePrescription/eDispensation module, as well as the eLab and the eX-ray ones. Patients also benefit from the AeHS, thanks to the use of the centralised appointment/booking system, the use of electronic prescription (Receta XXI), avoiding unnecessary visits to the health centre just to ask for repeated medication (of special interest for long term conditions), as well as personal access to their healthcare information through ClicSalud. Different health apps are being connected to the system.

Link to the EIP on AHA Repository of innovative practices:

https://ec.europa.eu/eip/ageing/repository/andalusian-ehealth-strategy-system-diraya_en

Innovation Scope:

- Regional/national EHR systems and summaries
- Care provider EHR systems integration (joined-up/shared records)
- Regional ePrescription system
- Online access to EHR

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 Andalusian health system organisational details, technical aspects of electronic Health Record, health-related digital solutions and Diraya system. Study visit reports were sent to important stakeholders/decision makers in Croatian health system and workshops with experts from Andalusia 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 (therapies for chronic illnesses for example). Afterwards, content for the enabled

features is added or removed by one click by the GPs in their own application.

The patients receive feedback about their prescription requests automatically when the GP accepts or refuses the request. Messages and appointment reasons from the patient are categorised 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 checkup, 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 (e.g. remind older chronic patients about the yearly flu immunisation). 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 eConsultations for GPs with specialists (cardiologists, psychiatrists, etc.) via two-way communication between both, starting with an eConsultation request from the GP.

The goal of eConsultation 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 eConsultation 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:
✓ B3. Replicating and tutoring integrated care for chronic diseases, including remote monitoring at regional level

Twinning Objectives:

An eHealth Strategy implementation at all levels of care is a complex experience requiring the contribution of different stakeholders. Andalusia RS has a vast experience on the definition, appropriation, maintenance, sustainability and scaling-up of its eHealth Strategy. The knowledge and best procedures to accomplish the main interests from City of Zagreb will be transferred. Particularly, all the elements needed in the full deployment of the Diraya system will be shared as well as the

technological aspect of it.

The system is supported technologically by the Andalusian Healthcare Service (SAS).

The overall information of the strategy and technical requirements are systematised and ready to be transferred. Transfer time would depend on the recipient's departure status in terms of information systems already implemented and degree of integration among them.

The objective of the twinning is the transfer of knowledge on how to implement and scale-up new eHealth services. After the study visit of delegation from City of Zagreb Reference Site to Seville, 4 areas that could be improved using Diraya-inspired innovative solutions were identified:

1. Primary care Patient Inflow Management
2. Care for complex patients
3. Cross-specialty HCP communication
4. Primary care appointment mobile application (mHealth setup)

Pilot projects improving those areas are currently being planned.

Initially, sessions and workshops in the City of Zagreb Reference Site with important national level stakeholder representatives and Reference Site teams were planned. This session has been postponed due to recent changes in Andalusia Reference Site and difficulties in the local agendas.

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

Twinning end result:

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