

DEVELOPMENT AND FURTHER IMPROVEMENT OF THE HUNGARIAN NATIONAL EHEALTH PLATFORM (EESZT) – HUNGARY

General information	
OP information	<p>Title OP: Human Resources Development Operational Programme</p> <p>Priority axis: 1: Social inclusion</p> <p>Investment priority: Enhancing access to affordable, sustainable, and high-quality services, including health care and social services of general interest</p> <p>Specific objective: Main objectives are linked to restructuring legacy health care processes and improving sustainable, high quality health services.</p>
Timeline	<p>Start date: 25.10.2013</p> <p>End date: 31.03.2020</p>
Budget	<p>Total budget: HUF 5,8 billion¹</p> <p>Co-financing rate: 100 %</p> <p>EU Fund: ESF</p>
Beneficiary/ies	<p>Main beneficiary: National Healthcare Service Centre (AEEK)</p> <p>Other organisations: -</p>
Category of intervention:	Enhancing access to affordable, sustainable, and high-quality services, including health care and social services of general interest
Contact details	<p>Name: Mr. Balint Szabo</p> <p>Organisation: National Healthcare Service Centre (AEEK)</p> <p>Role in project: project manager, head of EESZT department</p> <p>Phone number: +36 20 351 0864</p> <p>Email address: szabo.balint@aEEK.hu</p>
Project website	https://e-egeszsegugy.gov.hu/
Thematic block covered	Thematic Block 3: Uptake of e-health/digital solutions
Project summary	
<p>The Hungarian national eHealth platform (EESZT) electronically stores information about the patients, connects all the Hungarian healthcare providers (such as hospitals, pharmacies, general practitioners) making it easier for physicians working in different institutions to access all important health information about the patient. Medical documents, related to all the treatments a patient has received, shall be sent to the system, building up a complete patient case history. EESZT is integrated with existing systems, therefore clinicians, GPs and pharmacists can use their own health information systems (HIS). By using EESZT the physicians can rely on a detailed picture of the patient, which allows for more precise medical decisions, greatly enhancing patient safety. On the other hand, the availability of previous diagnostic results greatly reduces the number of repeated</p>	

¹ Equivalent to approximately 18.5 million euro (exchange rate 313.55 HUF/euro according to the ECB exchange rate of 2 May 2018).

diagnostic procedures.

The general public can also benefit from the developments through a specific portal: eeszt.gov.hu. Citizens are able to access all their medical records through the so-called “government gateway” or “Client Gate”, which is the official central electronic administration web service of the country. The portal allows citizens to view their medical record, electronic prescriptions, health care encounters etc. In order to protect sensitive medical data, the portal allows citizens to grant and restrict access to health professionals and to review the access log to their data.

The development of the EESZT system started in 2013 within the projects TIOP 2.3.1 and TIOP 2.3.2. The projects ended in November 2015 and created the IT infrastructure for the EESZT. 2016 saw the preparation of the rollout, including the amendment of the regulatory framework that allowed a live pilot. In February 2017 the pilot phase started with 42 institutions in order to perform the end-user tests using their usual medical information systems that had already been interfaced to the EESZT. In August 2017 the pilot closed with no false data, so it was ready for nationwide launch. In the meantime, the EESZT system was submitted to regular IT security auditing by national authorities for data protection and information security (NAIH and NEIH). Any data access is logged, and the access log is made available to the involved patient and the data protection unit of the involved healthcare provider. The data protection framework of the EESZT conforms with the requirements determined by both the national legislation and the GDPR.

On September 1st, 2017 the possibility to join EESZT was opened for all the Hungarian healthcare providers. By November 1st, 2017 every healthcare provider of the Hungarian public health system was obliged by law to provide the data they generate about each patient to the EESZT. In the meantime, the physicians working at such healthcare providers are able to access medical data of their patients in the EESZT, unless the patient has prohibited this. As of today, 83 health software developers in Hungary updated their medical software making them able to access EESZT, enabling most of the state financed healthcare providers to use the benefits of the system.

The development of EESZT is an ongoing process, new services and processes will be developed by the project EFOP-1.9.6. One of the next steps is the standardisation of EHRs and improving interoperability between legacy systems. These will allow to enhance cooperation between the Hungarian health care providers. A centralized e-consultation and telemedicine framework and a centralized imaging database necessary for e-consultation are also among the goals to be achieved by the end of the EFOP project in 2020.

Development and Implementation

Initiator/trigger

In 2011, a comprehensive restructuring of the Hungarian healthcare system started within the scope of Semmelweis Plan. The goal was to renew the health care sector in Hungary by building on sustainable grounds, to provide an efficient, quality-oriented and patient-focused health system. To achieve these goals, reliable and timely data are needed necessitating the interoperability of medical systems.

As of today, restructuring has not been fully completed yet. It is still necessary to carry on the work based on the strategy laid down in the “Healthy Hungary 2014-2020” sectoral strategy. The Complex Development of Electronic Health Services [EFOP-1.9.6] project is focusing on these developing tasks.

Project objective	<ol style="list-style-type: none"> 1. Interoperability of healthcare providers 2. Tracking of patient path allowing for better shared care 3. Data protection and privacy 4. ePrescription 5. Disease registries and pseudonymisation
Target group(s)	<p>The main target groups are:</p> <ul style="list-style-type: none"> • general public • healthcare providers • sectoral management: public offices, line-ministries of public administration
Project health-related indicators	<p>Main objectives are linked to restructuring legacy health care processes and improving sustainable, high quality health services, measured by e.g. the proportion of the EESZT-connected healthcare providers and of electronic referral and ePrescription</p>
Results	
Expected/attained results, outcomes and potential impacts	<p>In November 2017, the live operation of EESZT started to transform the paper-based or the locally working healthcare system to a modern, service-focused nation-wide eHealth system which meets all the latest demands and requirements related to data security, information technologies and healthcare.</p> <p>The system will be continuously improved by the introduction of new services and processes. Standardisation of EHRs and improvement of interoperability will have a crucial impact on the cooperation between Hungarian health care providers.</p>
Success factors & Challenges	<p>Key success factors are reorganised health care processes and improved quality indicators of health care. The most important innovative elements of the project are EHR standardisation, centralized e-consultation and telemedicine framework as well as a centralized imaging database necessary for e-consultation.</p> <p>The most important challenge until now is putting GDPR to use, because of its hard data protection requirement. The General Data Protection Regulation (GDPR) is a legal framework that sets guidelines for the collection and processing of</p>

	personal information of individuals within the European Union (EU). The GDPR sets out the principles for data management and the rights of the individual, while also imposing fines if the hard data protection requirements are not taken into consideration. The planning process of EESZT is considering and building in that conditions.
Potential for replication	Main results of this project are replicable in other countries using a centralised eHealth system, because the architecture of the system is flexible, and the key components are customizable according to local requirements. The workflows supported by the system are relevant to other European countries because of similar processes of health care.
Wider context	
Relevance of the project to the objective of the relevant thematic block	The project focuses on uptake of e-health and digital solutions in Hungary.
Relevance of the project objective to the specific objective of the OP	The most important objective of project is improving Hungarian citizens' health status by developing eHealth services.
Relevance of the project towards reducing health inequalities	While the project does not directly relate to the reduction of health inequalities, digitalisation leads to a more efficient and accessible healthcare system, which ultimately leads to the reduction of inequalities.
Relevance of the project towards the reform of health systems	The results of the project are suitable for maintaining Hungarian health care reform process, because of the improvement of new technologies and cooperation forms.
Relevance of the project objective to the national context and policy goals	The project corresponded with the objectives of the Semmelweis Plan. The Semmelweis Plan contains priorities, aims and principles for the Hungarian health care system for the periods 2012-14 and 2015-18. It also analyses the current health care system and lays out intervention strategy in the field of health care finance, informatics, management, quality, patient safety and public health issues.
Relevance of the project objective to health policy goals at EU level	The main results of the project contribute to EU health policy goals, especially to keeping people healthy, stimulating innovation in health sector and improving digital skills for health care professionals and citizens.