

## Campania – Olomouc (ADD Protection)

### Twinning overview

<b>Originator:</b> Department of Medicine, Surgery and Odontoiatrics, Salerno University, Campania	<b>Adopter:</b> University Hospital Olomouc, (with its unit Czech National eHealth Centre - NTMC)	<b>Innovative Practice:</b> ADD Protection
<b>Innovative Practice Description</b>		
<p>The innovative practice is the part of the so-called 'ADD protection' system, consisting in an ICT-based home monitoring system provided as a service by a private company of home care, that allows the hospital staff to follow the patients at home, as if the patient was still in the hospital. The data collected at the patient's home are made available to the staff of the hospital through a web-based platform, which feeds the hospital Electronic Health Record (EHR) of the patient.</p> <p>The good practice implements pro-active and multidisciplinary management of chronic diseases, with an approach beyond the boundaries of the health system. The focus of the practice is on the integrated management of chronic diseases that increase the risk of frailty and disability - specifically: hypertension, atherosclerosis, endocrinometabolic diseases, heart failure, malnutrition, osteoporosis and compliance to therapy. The good practice has the following characteristics:</p> <ul style="list-style-type: none"> <li>• An organisational model for managing homecare in the region with specific solution for Salerno sub region that uses ICT to integrate the community-targeted approach of healthcare, healthy lifestyles promotion and disease prevention with clinical databases,</li> <li>• The scaling-up the use of the ICT-supported services to other outpatients clinics for chronic diseases and increase the number of chronically ill patients that are enrolled in homecare and telehealth based follow-up;</li> <li>• The integration of all necessary processes between local healthcare providers (incl. family doctors), hospital and local health authorities to support continuity and integration of care by using shared database;</li> <li>• The integration of novel tools in the services provided to home assisted patients, such as teleconsultation and telemonitoring of vital signs;</li> <li>• A business model to run homecare by using innovative ICT solution;</li> <li>• The design of innovation in line with up-to-date EU wide recognised methodologies and recommendations, including quadruple helix, integrated care, patient empowerment and challenging chronic diseases in line with EIPonAHA innovation framework and also healthcare and care delivery transformation enablers as presented in Blueprint Digital transformation of HC and C for the ageing society.</li> </ul>		
<b>Link to the EIP on AHA Repository of innovative practices:</b>		
<a href="https://ec.europa.eu/eip/ageing/repository/home-care-early-and-protected-hospital-discharge-assistenza-domiciliare-dimissioni_en">https://ec.europa.eu/eip/ageing/repository/home-care-early-and-protected-hospital-discharge-assistenza-domiciliare-dimissioni_en</a>		
<b>Innovation Scope:</b>		
<ul style="list-style-type: none"> <li>• Homecare, tele monitoring and mobile health systems</li> <li>• Tele-mentoring and virtual consultations</li> </ul>		
<b>Innovation Type:</b>		
<p>The twinning raised a considerable amount of interest in implementing the good practice in the Czech Republic. At the present time, a national project (funded from Structural funds in R&amp;D field) has been defined and submitted in 2017. The degree of innovation of the twinning includes <b>level 1 and 2</b>.</p>		
<b>AHA Action Group:</b>		
<ul style="list-style-type: none"> <li>✓ B3. Replicating and tutoring integrated care for chronic diseases, including remote monitoring at regional level</li> </ul>		
<b>Twinning Objectives:</b>		
<p>The good practice in question actually relates to three areas (ICT in healthcare, homecare and</p>		

integrated care) that are all in underdevelopment in the Czech Republic for long time. This is in contrast with relatively good, acute and in some cases preventive care of citizens in the Czech Republic.

Considering these complex conditions UHO- NTMC develops two groups of activities: firstly, working in committees and other teams established by key national stakeholders (namely both pertinent ministries, insurances, regions and city (Olomouc)), associations of care providers, medical societies to support new concepts and associated changes targeted to ICT use in various instances of health and social care. Secondly, UHO-NTMC collaborates with a large spectrum of stakeholders from EU countries (and beyond) to shape local concrete actions that evaluate, demonstrate and provide evidence for regional and national scaling-up and for negotiation with national stakeholders mentioned above. The aim is to prepare conditions for changes that would enable provisioning integrated solutions in homecare, especially for senior or disadvantaged patients, as known in many EU countries.

The first group of activities are ongoing and negotiations and other activities are included, e.g. further development of the Czech national strategy of eHealth will be ongoing in 2017 and 2018.

The original objectives of the twinning are amended as follows:

- To adapt UHOs ICT platform for healthcare to enable more diseases to monitor and support.

Technical-medical specification and procurement of new telemonitoring system that is under preparation in UHO will be directly influenced by elements that prove the practices' efficiency at the Originator's Site. This covers requirement for early collaboration with developer of the new system, defining technical requirements that would enable the future system to provide more services and capabilities, such as teleconsultation, and will enable integration with future EHR.

- To familiarise healthcare professionals in the Adopter country with utilising eHealth technology that enhances self-management. The professionals can acquaint themselves with care management pathways that include telemonitoring of patients with various diseases so that the healthcare professionals will be able to design suitable pathways in UHO.

At least six groups of diseases (six clinics of UHO), for example anticoagulation treatment, pulmonary diseases, oncology, diabetes, heart failure and patients' nutrition will be possible to address for enhancing care by the use of new ICT tools. These groups have been specified in the 1<sup>st</sup> half of 2017, under the guidance of NTMC.

- To progress patient empowerment in the Adopter country by taking control over their own physical health with a focus on chronic diseases, including cardiovascular conditions.

The new ICT based system of UHO will include capabilities to support patient empowerment. These include information about the disease and instruction for the patients and also teleconsultation with medical staff.

- To scale-up a unique best practice using ICT for improving the physical condition of patients with chronic cardiovascular diseases on a European level.

This objective will be filled by directing a new program for patients with chronic diseases, incl. CVD that is under preparation in Olomouc region (complex UHO project to be decided at the beginning of 2018). It should enable the sharing of medical information between healthcare providers (hospitals) in the region and coordinate care. NTMC will also look for further opportunities to create a consortium for a future national or EU project that would cover the essentials of the good practice and will lead to their implementation.

- To understand essential aspects of integrated management of chronic diseases (incl. cardiovascular) in the view of design of similar programs in the context of the Czech Republic.

This objective will be filled by activities of NTMC in regards to the introduction of essential characteristics of the good practice to the stakeholders in homecare in the Czech Republic (i.e. first group of activities). The practice provides evidence that ICT-supported homecare can be viable in large scale. Organisational aspects, management and spectrum of services provided to patients in homecare will be integrated in a business model, which will be presented to stakeholders in the Czech Republic and aims to initiate a debate or progress in innovation of care of patients at home, especially seniors with chronic diseases. The first stakeholders are the Association of Homecare of the Czech Republic, Olomouc City and the whole region, the Ministry of Health and the Ministry of Labour and Social Affairs.

- To prepare joint project applications, that will enable further development of interventions, technological solutions and elements of the good practice by the Originator and Adopter.

The first joint project application following this twinning was submitted in May 2017 in EC call HP-HJ-

2017.

**Twinning end result:**

Implementation has not been realised yet. Briefly, different healthcare systems, limited health homecare, not favourable economic conditions, underdeveloped eHealth services in the Czech Republic are the main hindrances.