

# OUTPUT FACT SHEET

## Pilot actions (including investment, if applicable)

Version 2

<b>Project index number and acronym</b>	CE659 PPI2Innovate
<b>Lead partner</b>	Central Transdanubian Regional Innovation Agency Nonprofit Ltd.
<b>Output number and title</b>	OT3.1: PPI Pilots using PPI2Innovate tools and competence centres
<b>Investment number and title (if applicable)</b>	n/a
<b>Responsible partner (PP name and number)</b>	PP8: Somogy County Government
<b>Project website</b>	<a href="http://interreg-central.eu/Content.Node/PPI2Innovate.html">http://interreg-central.eu/Content.Node/PPI2Innovate.html</a>
<b>Delivery date</b>	07/2019

Summary description of the pilot action (including investment, if applicable) explaining its experimental nature and demonstration character

About the pilot idea:

Cardiovascular disease (heart attack, stroke) is one of the leading causes of death in Hungary. High risk factors for cardiovascular disease are hypertension, high cholesterol, obesity, and type 2 diabetes. In addition, type 1 diabetes as an autoimmune process associated with other immune diseases is also a worth of interest research area. Complex risk factors require classification into sub-groups and treatment, which can be carried out through the teamwork of the representatives of several fields.

The holistic approach to the complex treatment of patients is now an approved and forward-looking method - but its practical application by general practitioners (see practice communities) is only in initial phase; this method is not used by specialists. Currently, the patient's specialist treatment process takes place over several months. In several cases the condition of a patient migrating from one specialist to another may change to such an extent that the specialist opinions described on the basis of medical examinations are no longer relevant to the patient's new status. This can result in costly, unnecessary repetitions.

We have a concept of implementing a patient-centered treatment. The patient does not migrate, but the specialist team performs real-time examinations and makes diagnostic and therapeutic decisions according to a common treatment protocol. Somogy County Government, as a contracting authority, would like to implement a complex treatment system with the help of the General Department of Internal Medicine of Kapos Mór Education Hospital in Somogy County - with full diagnostics and therapy and for research purposes. The staff conditions of this are provided by the Hospital's Department of Internal Medicine - internists, gastroenterologists, diabetologists, immunologists and angiologists. The site of medical treatment service is Somogy County Kaposi Mór Educational Hospital General Department of Internal Medicine and Internal Medicine Clinic, as well as the presently developed treatment room, the equipment and complex IT needs of which we intend to provide through the present procurement.

The necessary tools - which would facilitate complex holistic treatment and enable its implementation with the above-mentioned personal involvement - are as follows:

**Powerful, advanced, portable computer (notebook) workstation** suitable for attaching various medical diagnostic instruments, recording, analysing and processing data measured by devices - for writing publications.

The device should be able to quickly and easily transfer data and connect to devices, to have multiple ports, a smart card reader and optionally a fingerprint reader for data protection (as provided by the Health Act).

Name of medical devices to connect:

1. **CGMS** - Continuous Glucose Monitoring System - for 24-hour continuous glucose monitoring with sensor technology, controlling, measurement and ideal metabolic controlling purposes
2. **ABPM** - Outpatient Blood Pressure Monitor - for setting tensio target, and for monitoring daily fluctuation rate for 24 hours
3. **Mini Doppler** - for examining blood flow in blood vessels and blood circulation
4. **Vein Scanner** - for the implementation of therapies and blood sampling

With the exception of the vein scanner, the above devices are regularly used devices in medical treatment, but with their combined use we would like to carry out a new complex service type health condition survey.

According to our plans, the patients' treatment would be carried out as follows: after a short ambulatory examination, where the medical history is recorded, physical examination is done, the blood vessels are checked with mini doppler and capillary microscope (available), and with the help of the vein scanner, the necessary blood samples are taken as targeted, preferably painlessly; then, two monitoring units (CGMS, ABPM) providing continuous validated data are placed on the body of the patient. With these devices on, the patient can do his usual everyday activities, or might even work. In addition to monitoring physiological parameters, the patient's activity, diet etc., we might also observe the personal data registered by smart devices (smart phone, smart

### NUTS region(s) concerned by the pilot action (relevant NUTS level)

HU232, Somogy County

### Investment costs (EUR), if applicable

Estimated amount of the tender was 29 000 EUR (6 350 000 HUF).

The final value of the procurement is 22 000 EUR (4 752 000 HUF).

### Expected impact and benefits of the pilot action for the concerned territory and target groups and leverage of additional funds (if applicable)

The target population of this form of treatment is primarily a high-risk group for cardiovascular diseases of the active age patient group. The form of treatment is remote monitoring, which helps to measure the patient's life signs, biological signals even outside the hospital environment with the help of mobile devices. The widespread use of monitoring, data collection and analysis solutions can become a standard part of health services while better, more user-friendly and effective applications are developed. In accordance with the specific needs, monitoring and data collection can be carried out by using periodic and continuous sampling methods, while in-patient treatment is primarily performed by periodic samplings; the current treatment model is focusing on continuous sampling methods.

There is a growing demand for an economical implementation of prevention and monitoring in healthcare, therefore new solutions are needed for personalized patient-centered treatment e.g. remote monitoring solutions, mobile devices and smart phone applications for medical purposes. They can provide efficient services with low infrastructure costs. The number of mobile devices and smart phones is increasing, these platforms offer new, unique opportunities for health services and applications. These solutions not only improve the quality of patient care, but they are also cheaper than the traditional in-patient health care service model. This is a move from a hospital-based service system to a citizen-oriented, personalized healthcare service. The patient and the doctor can save time, and analysing the data of a large number of cases can make decision making easier through the exploration of scientific trends.

Leverage of additional funds is not applicable at this moment of the project.

### Sustainability of the pilot action results and transferability to other territories and stakeholders.

The devices can be easily sustained by the County Hospital with manufacturer guarantees. Our project can be a good opportunity and example for other Hungarian Hospitals to use, the system will be available for other territories. The project has been introduced to the National Healthcare Services Centre of Hungary, owner and leader organization for Hungarian hospitals, so they can offer it to other stakeholders without transferability risks.

The effects of the conducted PPI procedure can be an example for other public procurers from Hungary aiming to innovate and for future public procurements in our region as well.

Our aim in general with the project is to grow importance of PPI in Hungary on national political level, and grow interest in PPI among public procurers in Hungary. The situation is that, we have limited experiences with PPI and risk avoiding attitude among public procurers in case of larger procurements, also limited innovative capacity among certain types SMEs and lack of national funds to support procurement of innovation or modern technologies and services. Somogy County Government will, therefore, actively participate in relevant actions and support, whenever possible, activities related to PPI, or implementation of PPI. Furthermore Somogy County Government is familiar with nationally customized PPI2Innovate Tools and will, whenever possible and applicable, apply them for future PPI project development, and offer it to other stakeholders.

It is obvious that the knowledge and experience acquired by the project team during the project implementation is transferable. Sharing of gained practice will be possible both within and outside the departments of Somogy County Government, during the implementation of other projects or within operation of project-based Central European Network of PPI Competence Centers. For transferability regarding the subject matter of the pilot PPI, it depends more on the effects of this new system. Demonstration of economic benefits within the product life cycle will definitely result in broader usage of the solution and its popularity in the hospitals of the region or in the country or EU-wide.

### **Lessons learned and added value of transnational cooperation of the pilot action implementation (including investment, if applicable)**

Innovation in the procurement of healthcare products and services has to be pursued through the involvement of a significant number of stakeholders. In fact, in addition to careful evaluation of health-economic data, tender decisions for innovative medical technologies should incorporate expert clinician output, in a way to answer in the most comprehensive way to questions of "value for money" for the purchase of fast-changing medical technologies.

In building the procurement team, then, it is important to engage experts in the legal, financial and technical aspects of public procurement, but also the appropriate stakeholders and end-users of the goods and services that will be purchased, in a way to ensure that these will be the most innovative modern and effective solutions.

Transnational cooperation among the different project partners was very useful and interesting. As for one of the participating from 9 project partners from 6 countries in the PPI2Innovate project we can say that the project was valuable experience through the peer review and mutual learning processes. Learning by doing experience philosophy guaranteed to receive feedbacks from the partners, all partner's expert's experiences can be used in the field of PPI Central Europe. Besides the PPI2Innovate Days gave also massive feedbacks from different public players in other Central European regions as well.

During the implementation of the pilot we often realized that other pilot partner operates in slightly different realities, the problems were often similar.

**Contribution to/ compliance with:**

- relevant regulatory requirements
- sustainable development - environmental effects. In case of risk of negative effects, mitigation measures introduced
- horizontal principles such as equal opportunities and non-discrimination

All relevant national and Eu regulations described in the directives were compliant with, during the implementation. Besides EU policy documents and regulatory interventions, significant contributions also came from supranational as well as national sources.

We choose the most economically advantageous tender, on the basis of criteria such as quality, price, technical merit, aesthetic and functional characteristics, environmental characteristics, sustainability, running costs, cost-effectiveness, after-sale service and technical assistance, delivery date and delivery period. Major emphasis is put, in practice, on environmental, social, innovative and quality-related aspects.

During the implementation of the whole pilot, the horizontal principles of equal opportunities and non-discrimination ensured within the pilot PPI procedure. According to this principles Somogy County Government acted properly to avoid discriminatory behavior in terms of gender, religion, age, origin, views etc.

**References to relevant deliverables (e.g. pilot action report, studies), investment factsheet and web-links**

**If applicable, additional documentation, pictures or images to be provided as annex**

The PPI pilot action carried out by Somogy County Government can be referenced to following project deliverables:

Thematic Work Package T3: 4 PPI Pilots using developed Tool and Network

Activity A.T3.2 Implementation of 2nd pilot action: SMART Health public service or solution at county level (Somogy County)

D.T3.2.1 Specification of requested SMART Health public service or solution for Somogy County.

D.T3.2.2 PPI Call for tender documentation.

D.T3.2.3 Approval of County Council.

D.T3.2.4 Report from selection process.

D.T3.2.5 Signed contract with winner of PPI

D.T3.2.6 Case study and Final Report from SMART Health PPI Pilot

Activity A.T3.5 Evaluation of pilot actions results and recommendation for PPI2Innovate tools improvements

D.T3.5.2 Mid-term transregional peer-review and mutual learning report

D.T3.5.3: Final transregional peer review and mutual learning

D.T3.5.4 Improved Action plans (Output 2.1) based on experiences from Pilots