

# "Virtual Health Centre (VHC)

# GOOD PRACTICE - PROJECT



European Union European Regional Development Fund

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#### Introduction to the Good Practise (GP)

VHC was developed in one of the work packages (WP3) of the "Public Health Focused Model Programme for Organizing Primary Care Services Backed by a Virtual Care Service Centre (2012-2017)" with the leadership of ÁEEK / NHSC and 8 partners (4 universities, 2 associations of care providers and the National Institute of Health Insurance Fund Management). The Model Programme aimed to strengthen health and social services emphasizing health needs of vulnerable groups such as children, the elderly and socially marginalized groups, primarily in geographic focus areas.

Main activities of the whole Modell Programme: Co-operations among Authorities, Research, Care providers, Business, Civil organizations and Patients for methodological development, trainings and monitoring of general practitioners' clusters, e-health and tele-health development, pilot activities in North Hungary & North Great Plain regions (HU) and central coordination of GP clusters, special programmes for Roma communities, research programmes, health policy analyses and recommendations. The Modell Programme has been executed in the most disadvantaged regions of Hungary, however it has been piloting innovative service solutions for the Hungarian primary care system in general as well.

Main activities of VHC: The Centre provides services for health- and disease management together with the persuasive platform for augmenting compliance. The VHC's main objective is to support the cooperation of general practitioners integrated in clusters together with some special healthcare professionals and staff. The VHC also supports the everyday work of a "normal" general practitioner.

#### Problem:

The whole Programme developed new procedures manuals for the cooperation among general practitioners' clusters (GPCs). The GPCs are based on the cooperation of general practitioners, public health coordinators, health professionals (dietitians, physiotherapists, health psychologist etc.,) nurses, public health experts, health visitors, roma health mediators and assistant health mediators coordinated by the GPC coordinators and managed by the Virtual Care Service Centre. This cooperation among the staff and management functions of the Centre are unique service innovation. Therefore, there were no existing tested and proved workflow, business process management (BPM) or ICT solution available for the new scheme of the "Public Health Focused Model Programme for Organizing Primary Care Services".

#### Solution:

Patients and health care professionals, interested public bodies and universities were involved during the innovation to define requirements for the specification of the public procurement of the supplier who developed the new software solution. The staff of the GPCs and the managing Centre were also involved testing the developed milestones and final results of the innovation. In this way necessary and useful changes could be made during the development phase.

#### Impact:

VHC was completed in 2016 and is going to be connected to the National eHealth System of Hungary (An interface to health information systems - HIS national health insurance system & private platforms and systems, mHealth applications, pharmacies, patients.)

Prepared to be connected with other platforms and software solutions of the National eHealth System in order to enable integration of personal and professional devices and access of care and cure professionals.

Varying new and unmet needs would occur opening new market for business to develop next generation of devices, software and applications designed by utilizing the free access provided by the VHC if the public driven service innovation - regarding (1) the new type of cooperation of general practitioners and specialized health professionals; (2) the management scheme of the Virtual Care Service Centre and (3) the VHC itself - could be disseminated and replicated successfully.

The whole programme aims to assist the creation of the primary care ICT ecosystem at national level by creating national guidelines of primary care software solutions.

The more the system is going to support tele-visits, virtual visits, contact visits and the patient's self-treatment processes, the stronger impact on the homecare market would be taken. Furthermore the patient data (recorded by the patients themselves) - with special respect of the data protection principles - shall provide excellent basis for varying BIG DATA analyses in the field of public health.





# 1. Relevancy of the GP project

The "Relevancy of the GP project" section provides quick check and definition of its relevancy in regards to HoCare project objectives.

Good practice of quadruple-helix cooperation in R&I?	No, this GP project does not include good practices of quadruple-helix cooperation in R&I
Good practice of delivery of Home Care R&I?	Yes, this GP project includes good practices of delivery of Home Care R&I.
If not in Home Care R&I, description and proof of its potential for transferability to delivery of Home Care R&I	This GP project includes good practices of delivery of Home Care R&I.
Generation of innovation in home care through answering unmet needs identified by formal or informal healthcare providers?	Yes, this GP project includes good practices of innovation through answering unmet needs.
Generation of innovation in home care through public driven innovation?	Yes, this GP project includes good practices of public driven innovation.
Generation of innovation in home care via quadruple-helix cooperation for quicker delivery to the market?	No, this GP project does not include good practices of innovation via cooperation for quicker delivery to the market.

### 2. Quick overview of the GP project

The "Quick overview of the GP project" section provides initial overview of the good practice project (GP project) and enables readers to see if this GP project idea is relevant for possible transfer to their organization potential innovation activities.

Name of the GP project	Virtual Health Centre (VHC)	
Region of origin of GP	Hungary	
project		
5 keywords that best	Primary & public health; deinstitutionalized prevention and care; clusters of	
describe the content of the	general practitioners; virtual health centre.	
GP project		
Relevant Operational	VHC was developed in one of the work packages (WP3) of the "Public Heal	
Programme name	Focused Model Programme for Organizing Primary Care Services Backed by a	
through which the GP	Virtual Care Service Centre (2012-2017)" with the leadership of ÁEEK / NHSC	





project has been funded (+ also in local language in	and 8 partners (4 universities, 2 associations of care providers and the National Institute of Health Insurance Fund Management). The Model Programme,
brackets)	comprising the 8th priority axis of the Swiss-Hungarian Cooperation Programme,
,	was financed by the Swiss Contribution Programme (85%) and Hungary (15%).
Relevant support programme / intervention area name of the GP project through which it	<ol> <li>"Resuscitated Health Care, Recovering Hungary–Semmelweis Plan for the Rescue of Health Care", the government department for health care has developed key strategies and action plans for the rescue of health care. The Semmelweis Plan was adopted by a Government Decree at the end of May</li> </ol>
was funded (+ also in local	2011.
language in brackets)	2. Revised project concept "Public health focused model programme for organising primary care services backed by a virtual care service centre" for the Swiss-Hungarian Cooperation Programme, Priority Axis 8 "Human resources and social development/health care" adopted by the Swiss and Hungarian authorities in May 2011.
Single or multiple	multiple recipients
recipients of the GP	
project?	
Type of lead recipient	National Institute for Quality- and Organizational Development in Healthcare and
(SME, LME, research	Medicines (GYEMSZI) – since April 2015 it has new name: National Healthcare
centre, innovation centre,	Service Center (ÁEEK). GYEMSZI/ÁEEK is a public body established by the
network/association,	Hungarian government and controlled by the minister responsible for health.
university/school,	GYEMSZI/ÁEEK was designated to coordinate and lead the implementation of
municipality, other public	the Model Programme as "Executive Agency".
body, other (specify)	
Types of participating	University of Debrecen
partners (list all	Hungarian Scientific Society of General Practitioners
participating partner types.	Association of Hungarian Health Visitors
E.g.: hospital, social house,	National Institute of Primary Care (OALI)
senior house, patient	National Health Insurance Fund Administration (OEP)
association, networks,	University of Pécs
SMEs, LMEs, research	Semmelweis University
actors, business supporting	University of Szeged
organizations, public	• GYEMSZI/ÁEEK
institutions/regulators,	
other (specify)	
Summary of the good	Main activities of the whole Modell Programme: Co-operations among





for methodological development, trainings and monitoring of general practitioners' clusters, e-health and tele-health development, pilot activities in North Hungary & North Great Plain regions (HU) and central coordination of GP clusters, special programmes for Roma communities, research programmes, health policy analyses and recommendations. The Modell Programme has been executed in the most disadvantaged regions of Hungary, however it has been piloting innovative service solutions for the Hungarian primary care system in general as well.
North Hungary & North Great Plain regions (HU) and central coordination of GP clusters, special programmes for Roma communities, research programmes, health policy analyses and recommendations. The Modell Programme has been executed in the most disadvantaged regions of Hungary, however it has been piloting innovative service solutions for the Hungarian primary care system in
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general as well.
Main activities of VHC: The Centre provides services for health- and disease
management together with the persuasive platform for augmenting compliance.
The VHC's main objective is to support the cooperation of general practitioners
(GP) integrated in clusters together with some special healthcare professionals
and staff. The VHC also supports the everyday work of a "normal" general
practitioner.
VHC provides basic information about prevention, care, cure and rehabilitation
services and diseases (incl. description of symptoms) for the general public and
inhabitants of the GP districts involved in the clusters.
The main functions of VHC support: health professionals in decision making;
data/information collection and processing; patients in the implementation of their
health/care plan; health status assessment for inhabitants in the GP districts
involved in the clusters.
The main components of VHC are / will be: Knowledge centre; Intelligent
modules for data analysis and information and knowledge extraction; Decision
making support modules.
What does members/staff of a GP cluster do?
Additional preventive and health care activities, e.g. medical risk and health
status assessment, lifestyle counselling, chronic care and rehabilitation
(performed by: General practitioners and at least one family paediatrician in
the cluster, Practise nurses, GP resident, Health professionals such as
Specialist nurse, Paediatric nurse, District health visitor, Community nurse)
and Service provider of dental primary care)
Management responsibilities in relation to the GP district cluster, organisation
of availability, coordination of resources; preparation and organisation of
prevention, care and rehabilitation programmes for individuals and groups;





accounting support (by public health coordinator and cluster coordinator head GP)

- Individual and community consultation, care, consultation for local institutions (by Health professionals, basically: dietician, physiotherapist, health psychologist and other professionals, e.g. addictology consultant, speech therapist, etc., as required)
- Organisation of primary preventive activities, provision of personalised communication; professional preparation for community programmes within the framework of secondary prevention, involvement in the agitation of the population; involvement in tertiary prevention, participation in health status assessment and lifestyle counselling (by Public health specialist)
- Health promotion activities in communities, agitation for participation in programmes; health education; information on primary and specialist care; assistance in using specialist medical services (e.g. roma and/or other disadvantaged groups) performed by non-professionals (by health mediators and assistant health mediators or health guards

### 3. Transferability

The "Transferability" section provides more detailed review of strengths and weaknesses of this GP project including description of necessary basic conditions for region and leading organization to potentially transfer it. At the end of the section, the key threats in the successful transfer open up possibility to focus on specific relevant issues important for the successful transfer.

What are the GP project strengths? Why it was funded?	• All stakeholders were involved in the development of the operations manual for the general practitioners (GP) integrated in clusters and the staff of the clusters such as the central management of the VHC;
	• The elaboration of the operations manual was based on preliminary research and scientific results;
	<ul> <li>The operations manual was approved by the supervisory board of the Model Programme;</li> </ul>
	• GP clusters were successfully established and their whole staff trained, such as the central management;
	• Public health results were measured and approved scientific methods, and

#### Strengths and weaknesses of the project





	<ul> <li>disseminated by in the end of the pilot;</li> <li>The pilot was implemented, and the 4 GP clusters, the central management and the VHC are maintained (current operation is financed by national financial resources).</li> </ul>
What are the key weaknesses of the GP project?	<ul> <li>Decision making both at work package and project/programme levels needed long time, because management intended to find consensus in order to avoid being questioned at the Supervisory Board (by project partners and stakeholders of the programme including donors and policy makers and end-users).</li> <li>Donors required the outsourcing of administrative project management for years<sup>1</sup> and professional leadership remained insourced, while great number of public procurement (external expertise, equipment, devices, hardware, software, etc.) had been planned in advance. Therefore, preparation of procurement documents (technical and professional specification and call for tender) and internal quality assurance of the procedure lasted too long. Due to this, there was less time to run trial actions and operate the procured and/or developed tools and work under the innovated system. (The maintenance period ensures further possibility to use and refine the achievements.)</li> </ul>

### Basic conditions for successful transfer

Why is this GP project	Good Practice of government initiative leading innovation in public health	
transferable? innovation,	management system targeting general practitioners clusters and primary care in	
impact, financial, legal, and	general via development of e-health and tele-health solution based on results of	
timeframe aspects	research and cooperation among stakeholders. The development comprised	
	significant part (complete work package) of a prevention focused primary care	
	model programme between 2012 and 2017.	
What are the <b>basic</b>	- Prevention and primary care should comprise a determining part/element of	
conditions the region	existing national or regional health policy and/or strategy;	
needs to have to be	- Financial and institutional stability on longer term (more than 5 years) to	
successful in transferring	implement and maintain pilot and replicate large scale programmes;	
this good practise?	- Cooperation among end-users (final beneficiaries, care providers), public	
	authorities, HEIs/research and business	

<sup>1</sup> Donors allowed to insource administrative PM for the last extra year of the project.





What are the <b>basic</b>	-	A feasible and well established idea, involvement of the target groups and
conditions the leading		promising tangible results for all key stakeholders or stakeholder groups;
recipient from the region	-	Experienced programme operator with central PM and existing network for
needs to have to be		local execution;
successful in transferring	-	Cooperation among end-users (final beneficiaries, care providers), public
this good practice?		authorities, HEIs/research and business

#### Key threats in GP project transfer

What are the key potential	• Institutional reorganizations, frequent changes of implementation and
threats for the GP project	regulation setup;
transfer?	<ul> <li>Lack or loosing of political and/or policy interest;</li> </ul>
	<ul> <li>Obstacles to shifting responsibility of LTC to primary care;</li> </ul>
	• Lack of integration and/or coordination among parallel and/or familiar
	programmes targeting integrated care and prevention focus.

# 4. Description of the GP project

The "Description of the GP project" section provides more detailed information on the Good Practice project (GP project) and enables readers to get further detailed inspiration and easy ready-to-use information for possible innovation transfer to other project applications. This includes: tackled problem, time length of the GP project, objectives, phases, activities and deliverables of the GP project, its main innovation and target group.

#### Description of the tackled problem

What was the <b>problem /</b>	The whole Model Programme developed new procedures manuals for the
challenge tackled by the	cooperation among general practitioners' clusters (GPCs). The GPCs are based
project?	on the cooperation of general practitioners, public health coordinators, health
	professionals (dietitians, physiotherapists, health psychologist etc.,) nurses,
	public health experts, district health visitors, roma health mediators and assistant
	health mediators coordinated by the GPC coordinators and managed by the
	Virtual Care Service Centre. This cooperation among the staff and management
	functions of the Centre are unique service innovation. Therefore, there were no
	existing tested and proved workflow, business process management (BPM) or
	ICT solution available for the new scheme of the "Public Health Focused Model
	Programme for Organizing Primary Care Services".
What were the reasons for	The Modell Programme developed new general operations manual and specific





the problem?	procedures for a prevention focused primary care cluster model based on a new
	integrated risk-driven approach. Procedures manuals are providing detailed
	guidelines for GP cluster staff and management to help their activities in
	detecting, assessing, understanding and improving health status of the
	population. There are guidelines to define and measure real Key Performance
	Indicators (KPI) of the GP clusters as well.
	The ICT system that has to support achieving the objectives of the Model
	Programme did not existed, thereby appropriate solution, workflow and BPM had
	to be developed. Technical specification of this development, however,
	depended on the delivery of the detailed guidelines/procedures.

### Time length of the GP project

What was the time length	2012-2017 (60M) pilot restricted to 24 GP districts, +maintenance period (5-7
of the GP project in	years)
months?	

### Objectives of the GP project

Describe the overall and	The overall objective of the whole model programme was to improve the overall			
specific objectives of the	health status of the population via the community orientation of primary care			
GP project	services that is focused on prevention and equity in access to services.			
	The specific objectives of whole model programme were:			
	• To improve the quality, efficiency and effectiveness of primary care services,			
	with particular emphasis on prevention;			
	• To increase the equity in access to and quality of primary care services,			
	especially for Roma population;			
	• To expand the scope of services by supporting the development of GP teams			
	operating in GP districts;			
	• To foster primary care that reduces the probability of complications of chronic			
	diseases;			
	• To develop data service and data processing IT applications for primary care			
	reports;			
	<ul> <li>To develop epidemiological research and analyses;</li> </ul>			
	<ul> <li>To improve primary care training and further training;</li> </ul>			
	• To increase patients adherence in prevention and individual empowerment			
	for self-management of health;			





The overall objective of VHC was to support achievement of the objectives of the
Model Programme.
The specific objectives of VHC was to deliver new tool for assisting decision
making at all levels (prevention, care, cure, management, policy making), data
management, reporting system of primary care and a supporting daily work of GP
clusters. In addition VHC has been focusing on helping to increase patients'
adherence and individual empowerment.

# Phases, activities and deliverables

List all main phases of the	Phases, activities and deliverables of VHC:			
GP project including their	1. In order to solve the problem by eliminating the reasons described above,			
time length	patients and health care professionals, interested public bodies and			
	universities were involved in elaborating requirements for the specification of			
	the public procurement of the supplier who developed the new software			
	solution. There was an interactive work among guideline/protocol and			
	workflow/BPM developers. This phase lasted from July 2013 to June 2014.			
	2. Prepared technical specification, draft blank service contract and other tender			
	call documents were submitted to the Hungarian intermediate body and the			
	Swiss donor to get preliminary approval before opening the call. (July 2014 $-$			
	Dec 2014)			
	3. The public procurement procedure (open, negotiated) ended in Dec 2015.			
	4. Development of VHC software (Jan - Sept 2016):			
	<ul> <li>Finalising the system plan, based on the technical documentation and the</li> </ul>			
	preliminary system plan;			
	a. Preparing the final interface plan			
	b. Preparing the final logical system plan			
	<ul> <li>Implementation of the IT system, based on the final system plan;</li> </ul>			
	a. Software development			
	b. Testing the developed software			
	c. Fixing the problems that had risen during testing			
	d. Training for the use of the new IT system			
	e. Implementation of the developed software			
	f. Transmission of the software documentation			
	Conducting professional discussions.			
	The staff of the GPCs and the managing Centre were also involved testing			
	the developed milestones and final results of the innovation. In this way			





	necessary and useful changes could be made during the development phase.	
List and describe all main	see above	
activities that were		
implemented by the GP		
project		
List all main deliverables	New tools for assisting decision making at all levels (prevention, care, cure,	
of the GP project	management, policy making), data management, reporting system of primary	
	care and a supporting daily work of GP clusters.	

### Main innovation of the GP project

What was the main	Patients and health care professionals, interested public bodies and universities			
innovation of the GP	were involved during the innovation to define requirements for the specification of			
project?	the public procurement of the supplier who developed the new software solution.			
	The staff of the GPCs and the managing Centre were also involved testing the			
	developed milestones and final results of the innovation. In this way necessary			
	and useful changes could be made during the development phase.			
	There was an interactive work among guideline/protocol and workflow/BPM			
	developers.			
	The praxis cluster model abandons the traditional physical medical card based			
	information storage, and transforms the paper world into a cooperative, well			
	documented paperless workflow services. State of the art healthcare is a			
	business of delivering healthcare services in a very complex, multivendor			
	business environment. Though we still have some individual heroes of medicine,			
	most of the work is an orchestrated cooperation of specialists and project			
	managers delivering standard services in mass volume. In short term the			
	healthcare of today is a big enterprise organization. Therefore the healthcare			
	supporting software should incorporate the modern Business Process			
	Management (BPM) tools that provide proper functionality, manageability and			
	agility. BPM framework automatically provides the instruments for performance			
	monitoring and Key Performance Indicator (KPI) metrics. The VHC model			
	concept provides the Business Architecture (BA) defining WHO does WHAT,			
	WHY, WHEN and HOW in the service business. The architecture is a structured			
	inventory of business processes, the actors and roles, the triggering events end			
	the outcomes. BA determines the demands on Information Architecture (IA), i.e.			
	the way the information is used, stored, collected or archived. Influencing data			







strategy via IA, BA defines the design of business and technical services in the layer of Technical Architecture (TA). Technology improvements change the capabilities of TA services what may broaden the original BA scope, creating a continuous development cycle. The aim of cooperation between WP-02 (Developing operations manual & guidelines/protocols) and WP-03 (VHC IT development) is to develop the GP cluster services as a Virtual Primary Care Enterprise (VPC Enterprise), using the described three architecture layers.

#### Target group of the project

Who was the main target	Population of GP districts;			
group of the GP project?	Management and staff of GP clusters (formal and informal care providers);			
(SME, LME, research	Authorities and policy makers.			
organization, university,				
public institution,				
healthcare provider,				
business supporting				
organization, other				
(specify)				
Describe the main target	Population of GP districts;			
group	Management and staff of GP clusters (formal and informal care providers):			
	• General practitioners and at least one family paediatrician in the cluster,			
	Practise nurses, GP resident, Health professionals such as Specialist nurse,			
	Paediatric nurse, District health visitor, Community nurse) and Service			
	provider of dental primary care			
	<ul> <li>Health coordinator and cluster coordinator head GP</li> </ul>			
	Health professionals, basically: dietician, physiotherapist, health psychologist			
	and other professionals, e.g. addictology consultant, speech therapist, etc.,			
	as required			
	Public health specialist			
	Authorities and policy makers :			
	• Local and central public organization contracting with GPs on provision of			
	and paying for priary healthcare services			
	<ul> <li>Central public agencies licencing medical services and activities</li> </ul>			
	Local and central policy makers			





# 5. Impact

The "Impact" section provides more detailed information on the effect of the GP project implementation and dissemination of major outputs.

#### Impact

What was the level of	VHC was completed in December 2016 and is going to be connected to the		
geographical impact of	National eHealth System of Hungary (An interface to health information systems -		
the GP project? (village,	HIS national health insurance system & private platforms and systems, mHealth		
city, county, country,	applications, pharmacies, patients.)		
international, other	Prepared to be connected with other platforms and software solutions of the		
(specify)	National eHealth System in order to enable integration of personal and		
	National eHealth System in order to enable integration of personal and professional devices and access of care and cure professionals.		
	Varying new and unmet needs may occur opening new market for business to		
	develop next generation of devices, software and applications designed by		
	utilizing the free access provided by the VHC if the public driven service		
	innovation - regarding (1) the new type of cooperation of general practitioners		
	and specialized health professionals; (2) the management scheme of the Virtual		
	Care Service Centre and (3) the VHC itself - were disseminated and replicated		
	successfully.		
	The whole programme aims to assist the creation of the primary care ICT		
	ecosystem at national level by creating national guidelines of primary care		
	software solutions.		
	The more the system is going to support tele-visits, virtual visits, contact visits		
	and the patient's self-treatment processes, the stronger impact on the homecare		
	market would be taken. Furthermore the patient data (recorded by the patients		
	themselves) - with special respect of the data protection principles - shall provide		
	excellent basis for varying BIG DATA analyses in the field of public health.		
What were the final impact	Impact indicators of the whole programme:		
indicators including their	1. Conclusions and recommendations of the programme have been taken into		
quantification?	account in health policy formulation		
	2. Life style (tobacco, alcohol etc.) related morbidity has decreased		
	3. Conclusions of the programme are incorporated into vocational training		
Describe the changes	• Extremely high proportion, 80% of inhabitants in the involved GP districts		
resulted from the project	took part in complete physical and mental health screening;		
activities	<ul> <li>Majority (64- 89%) of the population the involved GP districts got informed</li> </ul>		
	and is aware of the services provided by GP clusters, and great majority uses		





these services: diabetics 80%, musculoskeletal system 76%, hyperlipidaemia
79%, hypertonia 60%;
<ul> <li>Patient/client satisfaction rate has reached 94%;</li> </ul>
<ul> <li>Early detection of disorder and illness is significantly higher in the involved</li> </ul>
GP districts than in control ones;
<ul> <li>Significant improvement in health status of people receiving health</li> </ul>
psychological and dietetics care and corrective-gymnastic therapy.

### **Dissemination of outputs**

Describe dissemination	Web, media and conferences:		
activities of the project	<ul> <li>http://vek.praxis.gov.hu/hu</li> </ul>		
outputs carried out during	<ul> <li>http://alapellatasimodell.hu/index.php/en/</li> </ul>		
the GP project	<ul> <li>http://praxis.gov.hu/Svajci/ (registration required!)</li> </ul>		
	• 19th European Health Forum, GASTEIN, 28 – 30 September 2016, Project		
	session: Project 3 - General Practitioners' cluster (Lessons learned from the		
	Hungarian model based on (GPs') clusters)		
	<ul> <li>http://carewell-</li> </ul>		
	project.eu/fileadmin/carewell/other_documents/ehfg_2016_2pa.pdf		
	<ul> <li>https://www.ehfg.org/fileadmin/downloads/03-</li> </ul>		
	conference/2016/EHFG2016CR.pdf		
	Scientific publications:		
	http://alapellatasimodell.hu/index.php/en/szakmai-publikacio		
	http://phd.lib.uni-corvinus.hu/920/1/Kiss_Norbert.pdf		

### 6. Risks

The "Risks" section provides more detailed review of potential risks of this GP project implementation including their defined mitigation strategies to eliminate them.

Describe risks involved in	The institutional setup, responsibilities and mandates of public bodies involved in		
implementing this GP	the implementation of the model programme (incl. VHC) were changed,		
project including their	reorganized and merged during the execution period. Outsourced administrative		
mitigation strategies	project management could hardly mitigate the risk of delay caused by the		
	reorganizations, as the approval of the mandates of professional leadership on		
	programme and the work package levels were influenced by these changes,		
	such as approval of calls for public procurement tenders.		
	Therefore, the mitigation strategy was laid on monitoring and redesigning		
	execution plans, modifying contents and deadlines of milestones in order to		
	ensure delivery of expected main outputs and final results.		





# 7. Budget

The "Budget" section provides more detailed review of costs regarding the project implementation as well as operational sustainability after its end. In addition, if relevant, public tenders within the project and additional generated incomes by the project are showed and explained.

#### Budget

What was the overall	CHF 13 M grant from the Swiss Contribution Fund comprising 85% of the total		
budget of the project in	budget for the whole Model Programme. Additional 15% provided by Hungarian		
EUR?	Government. The total programme budget amounted CHF 15.3 M.		
List relevant budget lines	Work packages	budget CHF	
of the project including	WP-01 PM	1 322 293	
their % share from total	WP-02 Protocols	981 693	
then / share nom total	WP-03 VHC & IT for GP clusters	2 199 613	
budget	WP-04 Traning	302 616	
	WP-05 GP clusters	6 709 288	
	WP-06 Roma programs	537 414	
	WP-07 Monitoring & research	2 301 722	
	WP-08 Evaluation & Policy	638 878	
	WP-09 Communication	300 602	
	Total	15 294 118	
	Costs	budget CHF	
	1.Staff costs for PM	326 050	
	2.Staff costs for professional act	8 055 446	
	3. External professionals & services	5 344 958	
	4.Procured equipment	622 020	
	5.Procured IP	66 324	
	7.Other services	406 409	
	8.Publicity	218 660	
	9.Overhead	85 089	
	10.Travel & accomodation	169 163	
	11.Incidental	0	
	Total	15 294 118	

#### Additional income generated by the project

Did the project create any	no, the GP project did not generate additional income
additional income?	
If yes, specify which type	N/A.
of income and what	
amount in EUR?	





#### **Public tender**

Did the project include any	yes, the project included a public tender
public tender?	
If yes, specify what kind of	Project partners carried out total 34 public procurement procedures subject to
contract (specific contract,	national and/or EU roles during the whole Model Programme.
general contract, other)	3 of the total 34 were specific contracts to procure services delivering the
	different phases of VEK software (Net value: CHF 80K, CHF 90K and CHF
	526K). Other 3 specific contracts to procure services to prepare, monitor and
	assure development of VHC amounting total net value CHF 260K.
If yes, specify in what	EUR 850K net value for VEK and preparation of VEK (CHF 956K)
amount in EUR	
Describe the public tender	see above
subject	

#### Financial sustainability after GP project end

Was there an <b>operational</b>	yes, the GP project included an operational financial sustainability plan
financial sustainability	
plan in the project after its	
end?	
If yes, specify where the	Government of Hungary
operational funds after	
project end came from?	
If yes, specify the amount	EUR 1 M for 2017 (M6-12)
of operational funds in	
EUR	

### 8. Other information

In this section, specific additional information about the GP project could be revealed.

Please describe any other	1) The co-creation phase of BPM development and the preparation of technical
relevant information	requirements for procurement activities might have been carried out in PPI/PCP
about this GP project (if	regime if the relevant national legal system would allow that solution at that time.
relevant)	2) VHC was developed together with, but still have not been integrated with





META and MENTA platforms/APPs. The following procedures/programmes behind these developments, however, could be integrated later:

- META: Development of a personal health planning methodology and an APP (as a telecare/homecare tool for personal health planning).
- MENTA: Development of a unique m-Health application and web platform combining patient health data fed by the patient with the EHR stored in national healthcare databases.

3) Since the 1st of November 2017 Electronic Health Cooperation Service Space (EESZT) has been in operation connecting all general practitioners, in-patient and out-patient service providers and pharmacies (incl. e-prescription system and e-registries). EESZT enables local information systems and health professionals in the sector to work together. Its essential characteristics are cloud-based centralised platform and service-oriented architecture (SOA). VHC is planned to be integrated into this nationwide system. "*EFOP-1.9.6-16 Capacity Development and further improvement (by new functions) of Electronic Health Cooperation Service Space (EESZT) (accessibility, mHealth, PHR)*" - an ongoing ESIF major project amounting total €65M, financed by Human Resources Development Operational Programme - aims to develop at least 10 new functions for EESZT, i.a.:

- facilitate implementation of rules of regional care service obligation
- provide support to monitor and follow up passway within healthcare
- developing /improving access to channels of the Electronic Health Cooperation Service Space
- Personal Health Record (PHR): Developing/ designing new services for Electronic Health Cooperation Service Space with the aim to provide support for Telemedicine clinics;
- establishing specialized Big Data Registers in public health (immunization, pregnancy child care booklet, registry of exposure).

More information at:

<u>http://vek.praxis.gov.hu/hu</u> http://alapellatasimodell.hu/index.php/en/ http://praxis.gov.hu/Svajci/ (registration required!)





### 9. Information gathered by ...

The information about this good practise (GP) project has been gathered for the purpose of the HoCare project (Interreg Europe Programme) by the following organization:

Region	Hungary
Organization name(s) (+	National Healthcare Service Center - NHSC
in local language in	(Állami Egészségügyi Ellátó Központ - ÁEEK)
brackets)	
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National Healthcare Service Center