INTRAMED-C2C – INNOVATION TRANSFER IN THE MEDICAL SECTOR FROM CLINICS TO COMPANIES

GOOD PRACTICE - PROJECT

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Contents

Introduction to the Good Practice:

Innovation inspired by patients' problems - the staff of medical clinics have a high potential to assist in developing innovative products, processes and services that improve care. Yet, the transfer of innovation ideas from them to companies in Central Europe was weak. IntraMed-C2C helped doctors, nurses and technicians share their ideas with small- and medium-sized enterprises (SMEs) that supply their clinics. The results of this communication can be commercial products that improve medical care.

Problem:

1. Knowledge for innovation is available in clinics, not only referring to medical staff, but also to the scientific and technical employees. The problem is to encourage and extract the knowledge out of people´s mind. There is a significant lack of transfer of ideas to marketable products, because often no efficient incentive schemes exist to stimulate clinical employees to discuss identified innovations.
2. The clinical sector is largely dominated by global players on the supply side. If innovations are identified in clinics, they are discussed first with representatives of these clinics suppliers. In the past, they were however only interested in this discussion, if these ideas for innovations fit to their company and product strategy.
3. SMEs are highly interested to get access and to be involved in the innovation transfer process and they have certain advantages and flexibility in developing labtypes, prototypes and small business solutions for bottom-up innovation creation approach.

Solution:

- Analysis of key players in each regions
- Evaluation of clinics concerning their potential and motivation for inventions and innovations
- Regional innovation workshops with clinics (A) healthcare providers: medical doctors, R&D personell, technicians and nurses, B) SMEs: managers, marketing and product development managers, C) R&D: managers, engineers, technicians, D) other: healthcare insurrance companies, healthcare decision makers and political groups
- Pilot generation of new products, processes and services by cooperation of clinics and SMEs
- Transnational matching plan of clinical innovations with SMEs
- Deployment strategy of the Innovation transfer from clinics to companies for the Central Europe programme area

Impact:

- 10 pilot actions were carried out through the partnership as a kind of "proof-of-concept" for organising and performing workshops with the participation of the main target groups (healthcare providers, SMEs, R&D, insurrance companies and policy partners)
- More than 200 000 EUR of private / public funds were leveraged and invested into identified innovative ideas
- 38 public authorities, mainly hospitals, were engaged in implementing a transnational strategy/action plan for enhancing co-operation between themselves and companies, mainly SMEs
- 42 companies were able to introduce innovative products and/ or processes and/ or services through the improved access to knowledge transfer as a result of pilot actions
- 230 persons were trained during the lifetime of the project
- structures in the partner regions were established in order to improve the innovation transfer between clinics and the industry in order to realize innovative ideas
- the continuation of the activities depended on a financial support of local or regional institutions or authorities. The clinics themselves were not able to continue this process by their own and they need a moderator of the process in order to establish a process in the medium or longer term

1. Relevancy of the Good Practise (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?	Yes, this GP project includes good practices of quadruple-helix cooperation in R&I
Good practice of delivery of Home Care R&I?	No, this GP project does not include 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	InTraMed-C2C was set-up in order to enhance cooperation among formal healthcare providers (clinics) identifying various medical needs and SMEs where these needs were transfered to in order to create new innovative solutions. Although InTraMed-C2C was focusing on general health segment, the practise could be used also to set up projects specifically in the home care segment, using also cooperation with informal care providers, their associations and hospitals.
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?	No, this GP project does not include good practices of public driven innovation.
Generation of innovation in home care via quadruple-helix cooperation for quicker delivery to the market?	Yes, this GP project includes 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	InTraMed-C2C - Innovation transfer in the medical sector from clinics to companies
Region of origin of GP project	Czech Republic
5 keywords that best describe the content of the GP project	Knowledge for innovation available at clinics Innovation transfer to SMEs Regional innovation workshops Pilot generation of new solutions
Relevant Programme name through which the GP project has been funded	Interreg Central Europe (2010-2013)
Relevant support programme / intervention area name of the GP project through which it was funded	1.2 Establishing Capabilities for the Diffusion and Application of Innovation
Single or multiple recipients?	multiple recipients
Type of lead recipient and its role	Jointly as cooperation of 1) business jointly set up by regional

(SME, LME, research centre, innovation centre, network/association, university/school, municipality, other public body, other (specify)	government, science and industry as a corporation for innovation and technology transfer, and 2) non-profit association network for medicine, technology and healthcare whose members are companies, research institutes and public institutions.
Types of participating partners and their roles (list all participating partner types. E.g.: hospital, social house, senior house, patient association, networks, SMEs, LMEs, research actors, business supporting organizations, public institutions/regulators, other (specify)	Medical technology network – 3x – access to SMEs, concept and design of innovation transfer system, testing implementation, dissemination, cooperation with other regions Public authority – region – access to clinics and other stakeholders Public hospital – access to clinics, SMEs and other stakeholders Regional development agency - 2x – experience in innovation and clustering, cooperation between public and private sector University – 2x – access to clinics, researchers and SMEs RDI centre – involving regional stakeholders

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.

Strengths and weaknesses of the project

What are the GP project strengths? Why it was funded?	-the framework of the InTraMed project. There was a common understanding about the goal and the objectives of the project. Although the situation in each partner region/ country was quite different regarding the infrastructure of clinics, companies and technology transfer between them, each partner identified individual approaches based on the input of and discussions with the other project partners. This “cross-fertilization” was the motivation to find success ways for completing the tasks and steps of the project work plan. Moreover the Cross-fertilisation workshops of Central Europe annual meetings had a positive impact -hospitals told SMEs what they need, they had some big needs for something really basic, their needs were really practical and simple and nobody knew about these until they were identified via this project -local partners could support local SMEs in access to information of needs necessary for product / process / services innovation
What are the key weaknesses of the GP project?	-it was quite difficult to start and motivate the “owners” or “innovation actors” in the clinics as they have their daily issues, it is difficult for them to spend time on this, they are busy -the network and the access to companies are quite different based on each project partner organization and the specific situation in each partner country, and for example due to the economic situations in these countries the companies have no motivation to start such a technology transfer process -sustainability of developed database and innovation platform and exchange should be planned for sustainability of operation in long-term with a further facilitator, financial resources and continuous linkage to clinics´ needs and SMEs access

Basic conditions for successful transfer

Why is this GP project transferable? – innovation, impact, financial, legal, and	-the overall process started in each partner region with individual approaches and with a common understanding of the situation in each other partner region and country, the way how to access those with

timeframe aspects	needs (clinics) and those creating innovations (SMEs) might be different from region to region, this individualized approach was tested on international level -the idea could be transferable for example to public service or home care segment, just working with another target group to access the needs -the project can be set up as international or national -it is difficult for SMEs to reach hospitals and their needs and this approach presents a way how to provide benefits to unmet needs of hospitals
What are the basic conditions the region needs to have to be successful in transferring this good practise?	-the companies accessed or networked need to have motivation to start such a technology transfer process -it needs to be possible to motivate clinical staff in the given country based on the overall situation in clinics in this country -there must be a culture for finding innovative ideas by the direct access to clinical staff -SME infrastructure accessible in order to present, discuss or evaluate such identified ideas -the will to establish permanent structures in the partner regions aside of the project to sustain the innovation transfer between clinics and the industry in after project ends -the continuation of the activities will depend on a financial support of local or regional institutions or authorities. The clinics themselves will probably not be able to continue this process by their own -moderators like the project managers in the project are necessary in order to establish a process in the medium or longer term. The structures in the clinics do not focus on this generation of ideas till today. Especially SMEs do not have the access and resources to establish this process based on the situation at the end of the project.
What are the basic conditions the leading recipient from the region needs to have to be successful in transferring this good practice?	-intention to cooperate within the consortium beyond the end of the project on the developed tool and networks for their sustainability -will to get further public support for the platform operation or own or partner investment needed for further operation after project ends

Key threats in GP project transfer

What are the key potential threats for the GP project transfer?	-motivation of clinical staff due to the overall situation and practise in some countries resulting in no or low access to needs overview -poor motivation / integration of companies in the innovation transfer process resulting in low engagement to transferring identifies needs to innovations -facilitator for the sustainability and promotion of database after project ends and / or public authority support missing resulting in no sustainability of operation

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 problem /	Clinics have a high potential for innovations in product, process and service

challenge tackled by the project?	development in the overall medical industry, but this innovation potential is insufficiently transferred into results such as product development for companies, Intellectual Property (IP) generation and better healthcare processes.
What were the reasons for the problem?	One of the reasons for the insufficiently transferred results is that clinics and companies have different missions concerning handling innovative ideas. Clinics are “end-users” of innovations and clinics are also driving forces for bottom-up approaches of innovation transfer into the industry and their products. Companies, especially global players, are highly interested in providing their existing range of products to the clinics, new innovations are interesting only regarding the economic aspects. Moreover, these global players have established adequate access to the key functions in the clinics, supported by their distinctive marketing resources. As a result, global player dominate the supply of products and services in the clinics. Small and Medium Enterprises (SME) and developments initiated by the clinic staff often do not have the resources and chances to transfer their ideas and knowledge into adequate product developments.

Time length of the GP project

What was the time length of the GP project in months?	39 months

Objectives of the GP project

Describe the overall and specific objectives of the GP project	General goal of the project was to initiate the transfer of innovative product and process development ideas (innovation potential) from clinics to companies, preferably to SMEs, research & development organizations and other institutions. Specific objectives : -comparison of the situation between clinics and SMEs in each participating country in line with their specific healthcare environment and reimbursement system -development of tools for access of SMEs to the innovation capability in clinics -implementation of these tools -transformation of these tools to a transregional and transnational level -pilot generation of new products, processes and services -implementation of a European wide tool for innovation transfer from clinics to companies

Phases, activities and deliverables

List all main phases of the GP project including their time length	Identification of clinical ideas Evaluation of the ideas in regards to their innovative potential Pilot workshops and innovation transfer workshops with SMEs Development of medical innovation database Local steering groups set for sustainability of database operation
List and describe all **main activities that were implemented by the GP project**	TRANSREGIONAL ANALYSIS -Analysis of key players -local and transnational SWOT analysis -analysis of existing approaches -cooperation with EU projects ANALYSIS STATE OF THE ART, OTHER APPROACHES -regional workshops -Requirement report CONCEPT DEVELOPMENT

	-evaluation of clinics in every region -description of access ways to the target groups -development of motivational schemes -InTraMed-C2C framework -database -Guideline and toolkit ENSURING SUSTAINABILITY -regional development plans -transregional development plan PREPARATION -action plans per partner -implementation of local Steering groups -preparing workshops PILOT ACTION -pilot innovation workshops -pilot workshop report -follow up meetings -IP evaluation IMPLEMENTATION -implementing InTraMed-C2C -evaluation and match of innovations by database system -follow up of innovation workshops -training activities -transnational matching plan -deployment strategy for Central Europe EVALUATION -evaluation -monitoring -best practise report
List all main deliverables of the GP project	-Analysis of key players -Local and transnational SWOT analysis -Analysis of existing approaches -Cooperation with EU projects -Regional workshops -Requirement-report -Evaluation of clinics in every region -Description of access ways to the target group -Development of motivation schemes, motivation scheme report v1.0 -InTraMed-C2C Framework report -Database, innovation database report -Guideline and toolkit -Regional development plans -Follow up meetings -Implementing InTraMed-C2C -Follow up innovation workshops -Training activities -Transnational matching plan -Deployment strategy for Central Europe -Best practise report

Main innovation of the GP project

What was the main innovation of the GP project?	-Hospitals told SMEs what they need, they have some big needs for something really basic, their needs were really practical and simple -workshops with both target groups (matchmaking)

Target group of the project

Who was the main target group of the GP project? (SME, LME, research organization, university, public institution, healthcare provider, business supporting organization, other (specify)	-Clinics / hospitals -SMEs -Research & development institutions -Other relevant groups such as health care insurance companies, health care decision maker groups and relevant political groups.
Describe the main target group	The pilot innovation workshops brought together the clinical staff and SMEs which are interested and able to realise innovative ideas from clinics. Therefore the targets groups benefit directly from the project outputs. The other described target groups (Research & Development institutions, health care decision maker groups etc.) were addressed and integrated dependent on the possibilities and specific situation in each project partner region. 1. Clinics / hospitals: include university hospitals and clinics with all supply levels, publicly owned, private non-profit and private for-profit. Relevant groups in these clinics are primarily medical doctors, but also R&D employees, technicians and nursing staff. Within this group relevant people regarding innovations have to be identified by each project partner. Criteria are publication lists, research project involvements, generated IPs or others. 2. SMEs: decision makers / management, R&D staff, marketing / product development. From among SMEs those companies are relevant which have own resources or co-operations with others for initiating and performing technology transfer projects. 3. Research & development institutions: Decision makers, management, R&D staff, engineers, technicians. 4. Other relevant groups: health care insurance companies, health care decision maker groups and relevant political groups.

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 geographical impact of the GP project? (village, city, county, country, international, other (specify)	international
What were the final impact indicators including their quantification?	-1 permanent cooperation was established -10 pilot actions were carried out through the partnership as a kind of “proof-of-concept” for organising and performing workshops with the participation of the main target groups (healthcare providers, SMEs, R&D, insurrance companies and policy partners -More than 200 000 EUR of private / public funds were leveraged and invested into identified innovative ideas -38 public authorities, mainly hospitals, were engaged in implementing a transnational strategy/action plan for enhancing co-operation between

	themselves and companies, mainly SMEs -42 companies were able to introduce innovative products and/ or processes and/ or services through the improved access to knowledge transfer as a result of pilot actions -230 persons were trained during the lifetime of the project -structures in the partner regions were established in order to improve the innovation transfer between clinics and the industry in order to realize innovative ideas -8 policy documents – Joint Strategy + Action Plan -3 transnational tools developed -9 trainings for new tools organized -203 980 EUR of private/public funds leveraged
Describe the changes resulted from the project activities	-establishment of regional structures to support sustainability of developed tool -enhancing framework conditions for Innovation -fostering knowledge development -identifying specific needs of clinics -the knowledge transfer from partners with some kind of experience in the area of medical technology networks with clinics and companies were highly beneficial for partners who did not have such experience. -implementation of tools developed in the project -establishing the processes and procedures of the innovation workshop system -stimulation of future investments. -created networks between clinics and SMEs - the fact that the medical device industry needs innovations more than other industries (due to the short life cycle of the products) and a lot of ideas exist in clinics (resp. the staff of clinics) it was essential to bring these two parties together. Exactly this was done in the project by the moderators (project managers of the project partners).

Dissemination of outputs

Describe dissemination activities of the project outputs carried out during the GP project	-presentation at 11th National Conference on Medical Informatics in Budapest - drawing the attention of the nearly two hundred participants to the fact: they can make good use of the tools supporting the innovation transfer from clinics to companies, developed by the project -presentation at thematic international workshop on e-health and info biomedical technologies within the frame of the Hungarian-Italian Cultural Season at the Óbuda University in Budapest - underlining the transregional aspects of the innovation transfer and emphasizing that the project partners of InTraMed-C2C – as agents assisting the innovation transfer – are delighted at the requests from any European country with innovation ideas or business and manufacturing competence. The InTraMed-C2C medical innovation database is the main tool in the project for the transregional matching of innovations and production capacities. -article about the project activities published in the periodical IME (the professional journal of health managers) -newsleters -project video -regional dissemination events executed by each partner in given region -project website -brochures -Best practice report published, -68 press releases -final conference

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 implementing this GP project including their mitigation strategies	-sustainability of operation after project ends -access to clinics and SMEs being difficult in some regions and for some partners due to local situation and networks

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 budget of the project in EUR?	2 120 000 EUR
List relevant budget lines of the project including their % share from total budget	Staff costs – 62% Administration – 4% External expertise – 16% Travel and accommodation – 7% Meetings and events – 5% Promotion costs – 4% Equipment – 0,1% Other – 1,9%

Additional income generated by the project

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

Public tender

Did the project include any public tender?	no, the project did not include a public tender
If yes, specify what kind of contract (specific contract, general contract, other)	N/A
If yes, specify in what amount in EUR	N/A
Describe the public tender subject	N/A

Financial sustainability after GP project end

Was there an operational financial sustainability plan in the project after its end?	no, the GP project did not include an operational financial sustainability plan
If yes, specify where the operational funds after project end came from?	N/A
If yes, specify the amount of operational funds in EUR	N/A

8. Other information

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

Please describe any other relevant information about this GP project (if relevant)	-Project video in english available here : https://www.youtube.com/watch?v=3Qx7DhQSQEo -Project basic information: http://www.central2013.eu/nc/projects-2007-2013/approved-projects/funded-projects/?tx_fundedprojects_pi1[project]=73

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:

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