

Project implementation Component 3 ICT

Integration and interaction of ICT project activities with the
activities of the other project components
Ukraine Swiss MCH Program

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Disclaimer

The views and ideas expressed herein are those of the author(s) and do not necessarily imply or reflect the opinion of the Agency.

Abbreviations

CCUP	Comprehensive care for unwanted pregnancies
ICT	Information & Communication Technologies
HP	Health Promotion
SCIH	Swiss Centre for International Health
STI	Swiss Tropical Institute
WG	Working Group

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1 Project outline for component 3 Information & Communication Technologies

The component 3 will develop its activities along two main streams. The first stream is the up-scaling of Telemedicine in the institutions of the new partner regions contributing to the improvement of perinatal services. The second stream is supporting the other components of the project with the means of Information & Communication Technologies (ICT) contributing to their successful implementation.

The component's objectives are:

- Strengthen professional networking
- Support training activities of project participants
- Document and avail project outcome and products

The component 3 is rather a facilitator for the other components than an independent component of its own. Interaction in both directions with the other components is required to fully develop its benefits. The potential for interaction and collaboration is shown in Figure 1 and outlined here below.

		Provider						
		comp. 1	comp. 2	comp. 3.1	comp. 3.2*	comp. 3.3	integrated comp. 4	integrated comp. 5
		MCH Promotion	Int. Perinatal Care	Telemedicine	eLearning	Exchange Platform	Management	CCUP
Beneficiary	comp.1 MCH Promotion				Support Health Promotion activity through eLearning tool			
	comp. 2 Integarted Perinatal Care			Up-scaling tele-consultation Case dissemination for learning	Support clinical training through eLearning tool	Capitalisation 2nd phase and Exchange 3rd phase		
	comp. 3.1 Telemedicine		Essential training package telemedicine		Elaborate computer based training for IPath	Structured feed-back/monitoring system		
	comp. 3.2 eLearning			Resource for problem based learning	elaborate eLearning manual	Visualization and sharing of achievements		
	3.3 Exchange Platform	Capitalisation 2nd phase and Exchange 3rd phase						
	integrated comp. 4 Management				Support management training through eLearning tool	Forums e.g. CCUP		
	integarted comp. 5 CCUP				Support CCUP training through eLearning tool			

Figure 1: Matrix of cross-sectional collaboration

1.1 Telemedicine: Strengthen professional networking

Through the Telemedicine activities the professional networking shall be facilitated and strengthened. The main activities will concentrate on the up-scaling of the Telemedicine activities using the model developed during the previous project phase. The implementation framework for Telemedicine requires the commitment

and support of the regional and district health authorities. It is mandatory that this component is an integrated part of the planned sensation work-shops where the objectives of the activity and the requested contributions can be outlined and discussed with the main stakeholders.

1.1.1 Up-scaling Telemedicine

The Telemedicine network shall be extended to hospitals of the new partner regions and districts. The local health administration will have to provide financial resources to procure computers and install internet access for the telemedicine work places. Beside that they have to cover up the operational costs for the use of the internet.

The various difficulties faced with the technical administration of the ipath server during the previous phase require an analysis of the current situation. The institutional collaboration between Mohyla and the project is not satisfactory and the evaluation of alternative solutions is a mandatory requirement for this project phase.

1.1.2 Case dissemination for learning

ipath shall be used for the regular online discussion of selected cases. These cases shall be prepared and worked on previous to a clinical training session as part of the preparation for the trainees.

Further short clinical trainings shall be provided regularly online through ipath for specific topics. Interested participants might login during the fixed schedule and follow the presentation from their hospital or from home.

1.1.3 Resource for problem based learning

The ipath platform is a resource of cases which can be used to develop training modules for problem based learning. This modules might be conventional teaching or in the format of eLearning. It has to be realised that an analysis of the cases discussed on ipath gives quite an idea about the most frequent difficulties clinicians are facing. This is the point where training activities shall start from.

1.2 eLearning: Support training activities

There are quite a number of training activities planned within the project. Actually a major part of the project is about dissemination of the previous phase's project achievements. It is evident that this will be done in face to face lectures with the "Essential Training Package". Component 3 aims to support these training activities using the means of ICT as outlined in chapter 1.1.2 but also while developing new eLearning modules for all the other components.

1.2.1 eLearning tool for Health Promotion activities

One eLearning tool in the field of Health Promotion (HP) shall be elaborated either based on the existing framework developed in the previous phase or with a new approach if required. The tool shall transport a key topic of HP with the objective to provide training for stakeholders (GP, social worker, etc.) having access to the desired target group.

1.2.2 eLearning tool for Integrated Perinatal Care

At least one additional eLearning module in the field of perinatal care shall be elaborated based on the existing framework which will be further developed and improved in order to match current didactic requirements of modern learning methods and tools. The topic of the eLearning module could be an extension of the normal delivery process towards the pathologic delivery process and the neonatal

reanimation care. Basically the module should correspond to the clinical priorities determined by the.

1.2.3 eLearning tool for the Management training

A suitable topic within the integrated component Management training shall be identified together with the component leader and an eLearning module/tool shall be elaborated.

1.2.4 eLearning tool for Comprehensive Care of Unwanted Pregnancies

One eLearning tool in the field of comprehensive care of unwanted pregnancies (CCUP) shall be elaborated based on the existing framework which will be further developed and improved in order to match current didactic requirements of modern learning methods and tools. The tool shall transport a key topic of CCUP for which eLearning is an appropriate means of knowledge transfer e.g. guidelines on safe clinical practice.

1.2.5 Computer based training module for ipath

ipath user training for the health professionals must be provided during face to face lectures included in the “Essential Training Package”. Complementary an option is to develop a computer based training module about ipath usage for the repetition at home or for new users who did not benefit from the “Essential Training Package”.

1.2.6 Elaborate model for the eLearning module

Analogue to the model description for the implementation of Telemedicine into clinical practice a model description for the elaboration of eLearning modules using the existing model shall be elaborated. This shall transfer the knowledge to other project components enabling them to develop their own eLearning tools.

1.3 Exchange Platform: Document and avail project outcome

Component 3 will implement and operate a web based exchange platform in order to support project activities and to capitalize project outcome. The exchange platform will serve as central node for an active Knowledge Management within the whole project. The platform has to be attached to a strong institutional partner with a committed interest to use it for its own purposes as well.

1.3.1 Capitalization of project outcome

In the previous phase of the project extensive material has been elaborated. The goal of the exchange platform is to compile and disseminate project outcomes and products from the current and the previous phase among interested stakeholders and the public environment. The process shall be organized along the Knowledge Management (KM) cycle in order to assure availability and access of up-to-date quality information. The information provided through the platform must be “cultivated” by a so called Knowledge-Broker nominated by each project component. The platform will be structured in an internal area for project activities and documents and a separate external area to publish project results to the attention of the public.

1.3.2 Project working environment and exchange platform

The platform puts at the disposal of each project component a working environment including various tools for collaboration and communication for instances

- the possibility to organize and moderate public forums for adolescents on specific topics, e.g. HIV/AIDS, contraception etc.
- the possibility to organize virtual class rooms for students to prepare and follow-up face to face lectures, distribute course documentation and material for self-assessment at home etc.
- a database containing the course material of the “Essential Training Package” accessible online to all registered students

1.3.3 Structured feed-back and monitoring system

Program and component monitoring and evaluation could be organised over the platform, collecting information about the indicators centralised in a structured format, comparable and transparent for all project responsible.

The exchange platform can serve as ‘marketplace’ for all project stakeholders to share opinion, to reflect project effects and achievements and to obtain feedback. The collection of required information in a structured format will enable the Coordination Board to handle and formalise the main coordination needs of the program.

1.3.4 Health Management Training

The integrated component on Management shall use the exchange platform for data collection and discussion in the frame of the management training. Collection and synthesis of structured data is a prerequisite for informed decision making. Theoretical managerial knowledge acquired through the “Essential Training Package” shall be translated into a real practice example while collecting and analysing data in the hospital and drawing conclusions which afterwards will be discussed in a forum.

2 Project Implementation

Component 3 will be implemented along three streams of activities (Figure 2) which will overlap with the activities of the other project components. The three streams will be developed independently but may support each other for specific purposes or interact to create synergies.

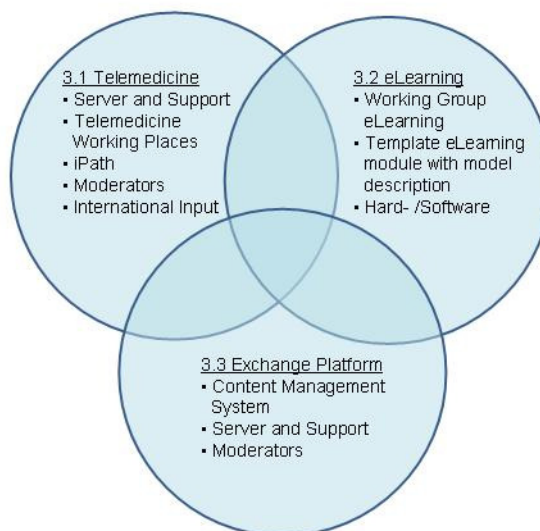


Figure 2: Streams of activity

For each stream a set of preconditions must be fulfilled in order to assure the success of the planned activities. These preconditions comprise of technical hardware and infrastructure as well as manpower.

2.1 Organisation and Resources

There will be three working groups (WG) which will be responsible to implement one stream of activities each during the three years. The WG consist of a working group leader and associated members according to the concrete activity and the skills required.

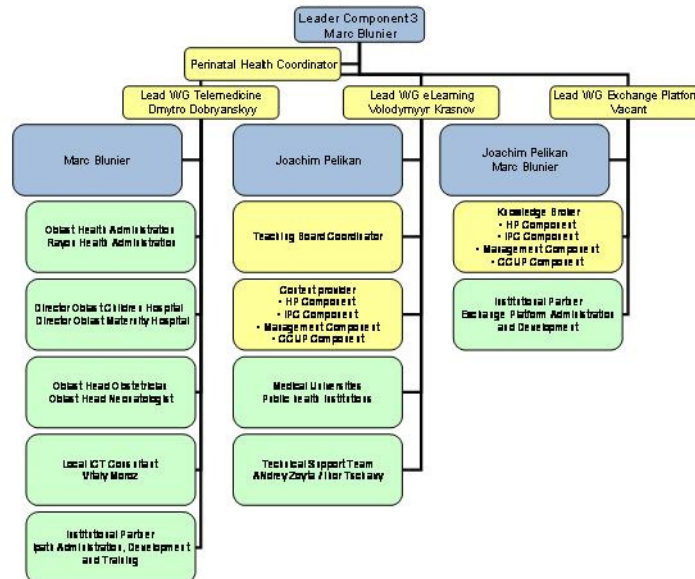


Figure 3: Organisational Chart Component 3

2.1.1 Telemedicine Working Group

The WG Telemedicine is lead by Prof. Dmytro Dobryansky who in the same time is the Moderator of the Telemedicine Perinatal health group on the ipath platform. In the new phase the Telemedicine network will grow extensively and the workload for the moderation of the network will increase. Therefore it is envisaged to build up a Co-Moderator who will share the tasks in the future. The WG will be consulted through the component leader Mr. Marc Blunier.

In the beginning of the scaling-up phase direct cooperation with the Oblast and Rayon Health Administration is required in order to create awareness about Telemedicine, identify the commitment of the authorities and prepare the legal ground for the participating hospitals [1]. Therefore it is vital that representatives from component 3 are involved in the work-shops where the project and its components are presented and the preconditions for participation are outlined. In a further step hospital directors and oblast head Obstetrician and head Neonatologist need to be addressed in order to create awareness and acceptance of the concepts and understand the potential benefits of Telemedicine. These are the prerequisites for the successful clinical integration. Unless this has not been achieved, the provisioning of technical infrastructure and the training of health professionals is obsolete.

The WG will have to establish a team, probably in collaboration with an institutional partner, which will take responsibility to provide the training of the Telemedicine model and the ipath hands on training in the frame of the “Essential Training Package”.

A local Information and Communication specialist will be required to assess the local hospital infrastructure and consult the hospital directors for the provisioning of internet access and the computer for the Telemedicine work place.

The technical administration and further development of the ipath platform in collaboration with Mohyla is not a sustainable solution and a new institutional partner with a professional interest in Telemedicine needs to be engaged.

2.1.2 eLearning Working Group

The WG elearning will be lead by Mr. Vladimir Krasnov who already successfully managed the development of the pilot eLearning module “Normal Delivery”. The WG will be consulted through the Knowledge Management and eLearning specialist from the Swiss Centre for International Health Mr. Joachim Pelikan. A representative of the Teaching Board will link with the WG in order to assure that the requirements of the “Essential Training Package” are reflected in the modules that are elaborated to complement the training activities.

Depending on the subject content of the eLearning module to be elaborated the WG will be complemented by specialists from the other project components and/or by external specialists from institutions of higher education within Ukraine. International experts will be consulted to validate content with evidence based knowledge.

WG will be supported by the technical team which will assure the technical implement and adaptation of the model to the requirements of the new content. Further they will support the development new features to continuously improve and adjust the model to latest standards of didactics as well as enhance the interactivity and refine the tools for self-assessment of the students.

2.1.3 Exchange platform Working Group

This working group will be consisting of the technical support team and the content provider team.

An institutional partner will be required to provide the technical support for this activity. The institution is requested to implement and operate a web-based open source content management system and to provide technical support to the working group. This means mainly adaptation and configuration of the system to the project needs. Further it is required to administrate the server and perform the regular up-dates of the software and tools. The institution might also be involved in the initial training of the Knowledge-Broker. Conditions to be fulfilled by the institution are a professional interest to learn from the experiences made during the project and the commitment to implement the platform in its own teaching environment for their teachers and students.

The content provider team consist of the Knowledge-Broker nominated by each project component. The Knowledge-Broker needs a good knowledge of the component and its activities and acts as an interface between the knowledge owner (those who develop and create knowledge and products) and the operator of the exchange platform. The Knowledge-Brokers are responsible for the identification, selection, preparation of information and resources generated in the component and to avail it on the exchange platform.

3 References

- [1] Model for the implementation of Telemedicine for Consultation Services within the Ukrainian Perinatal Health System; Dmytro Dobryansky, Marc Blunier; 28.12.2007