

Result number 4

## **Interim report on quality assurance, evaluation and validation of the ICT training Model**

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- 1 Evaluation aspects..... 3
- 2 Intermediate results of the aspects of quality assurance, evaluation and validation of the ICT training Model..... 4
  - 2.1 Internal evaluation of intermediate and final project results (process evaluation) ..... 4
    - 2.1.1 Aim..... 4
    - 2.1.2 Method..... 4
    - 2.1.3 Results ..... 6
    - 2.1.4 Discussion and conclusion..... 7
  - 2.2 Internal evaluation of the project in general (process evaluation)..... 7
    - 2.2.1 Aim..... 7
    - 2.2.2 Method..... 7
    - 2.2.3 Results ..... 8
    - 2.2.4 Discussion and conclusion..... 8
  - 2.3 Validation of the developed training model (product evaluation) ..... 10
    - 2.3.1 Content validity ..... 10
    - 2.3.2 Effect evaluation..... 14
- 3 Points of action: summary..... 17
- 4 Attachments ..... 18
  - 4.1 WP goals and timing..... 18
  - 4.2 Questionnaire to measure the content validity ..... 18

## 1 Evaluation aspects

From a methodological point of view, the “Plan for quality assurance, evaluation and validation of the ICT training Model ” does focus on the evaluation of two particular connected aspects:

- “Process” management (system evaluation), which concentrates on organizational project issues, in order to facilitate the accomplishment of planned project aims. It consists of:
  - Evaluation of the processes in each WP
  - Evaluation of the process of the project group
- Outcomes in terms of “results” obtained according to the planned activities (product evaluation). It consists of:
  - Evaluation of the content validity of the Model
  - Evaluation of the effect of the Model

## 2 Intermediate results of the aspects of quality assurance, evaluation and validation of the ICT training Model

### 2.1 Internal evaluation of intermediate and final project results (process evaluation)

#### 2.1.1 Aim

Evaluate the progress of all the WP.

#### 2.1.2 Method

In order to follow the progress of the WP's, we asked each partner to establish their goals and timing for their WP. Therefore the Excel-file 'WP goals and timing' (attachment 1) was asked to be completed at the start of the WP, including following criteria:

- Objectives: what are the objectives and sub objectives of the WP?
- Indicators: what are the requirements to achieve the objective?
- Strategies: which strategies will be used to achieve the objective?
- Deadline: when will the objective be achieved?
- Costs: what are the estimated costs in order to achieve the objective?

This information is used to establish an intermediate and final evaluation of the process of the WP. The timing and deadlines of the different evaluations is shown in following tables. The completed evaluations are shown in table 1, the evaluations which will be done in the future are shown in table 2.

No	Objectives (project/intermed.)	Indicators	Target values	M	Evaluation methods	Time schedule	S/O	Respons.
<b>1</b>	<b>WP3</b>							
1.1	Intermediate	- Timing - Costs	Efficient and effective process	1	Digital English questionnaire	March 2014	S	SUPSI-DSAN Artevelde University College
1.2	Final	- Timing - Costs	Efficient and effective process	3	Digital English questionnaire	July 2014	S	SUPSI-DSAN Artevelde University College
<b>2</b>	<b>WP4</b>							
2.1	Intermediate	- Timing - Costs	Efficient and effective process	3	Digital English questionnaire	July 2014	S	JEDU Artevelde University College

Table 1 Completed evaluations

No	Objectives (proejct/intermed.)	Indicators	Target values	M	Evaluation methods	Time shedule	S/O	Respons.
<b>3</b>	<b>WP4</b>							

	Final	- Timing - Costs	Efficient and effective process	7	Digital English questionnaire	October 2014	S	JEDU Artevelde University College
3	<b>WP5</b>							
	Intermediate	- Timing - Costs	Efficient and effective process	10	Digital English questionnaire	February 2015	S	ECAP Artevelde University College
	Final	- Timing - Costs	Efficient and effective process	11	Digital English questionnaire	June 2015	S	ECAP Artevelde University College
3	<b>WP6</b>							
	Intermediate	- Timing - Costs	Efficient and effective process	8	Digital English questionnaire	January 2015	S	Solidarnosc Artevelde University College
	Final	- Timing - Costs	Efficient and effective process	13	Digital English questionnaire	September 2015	S	Solidarnosc Artevelde University College
3	<b>WP7</b>							
	Intermediate	- Timing - Costs	Efficient and effective process	9	Digital English questionnaire	January 2015	S	ForModena Artevelde University College
	Final	- Timing - Costs	Efficient and effective process	14	Digital English questionnaire	September 2015	S	ForModena Artevelde University College

**Table 2 Uncompleted evaluations**

### **2.1.2.1 Data collection**

By completing a questionnaire, we ask the partners to evaluate their selves. A Google docs questionnaire was used to evaluate if the WP's reached their goals. To evaluate this, the goals per WP - which the partners have sent us at the start of their WP in the Excel file – were used. The partners were asked by e-mail to complete the questionnaire in the Google docs file.

In this Google docs file, the goals of the WP were sent back with the evaluation form in het Google docs file. The partners were contacted by e-mail and were asked to complete the questionnaire.

On March 25<sup>th</sup> all project partners were contacted by e-mail with an overview of the planning for the intermediate and final evaluation. We also asked the partners to complete send their goals for their WP in the Excelfile.

### **2.1.2.2 Participants**

For each partner, we asked one person to complete the questionnaires.

## 2.1.3 Results

### 2.1.3.1 Intermediate and final evaluation of WP3

There are no data of the intermediate evaluation, due to the late response of the goals and aims of this WP. The goals and aims of this WP were sent on May 19<sup>th</sup>. As this WP ended in July 2014, no further intermediate evaluation was done.

The final evaluation was completed on August 28<sup>th</sup>.

	Objective	Intermediate evaluation	Final evaluation
<b>Objective 1</b>	Transfer plan for implementing: towards an innovative and sustainable way of coping with demographic change		
	- The training content is made		The training content isn't ready yet. The tests are still to come.
	- The complementarity with the ICT-platform		This objective is not reached yet. The work is in progress.
	- Networking of trainees		The tests are not started yet, but is in the next phase.
	- The costs are lower or equal to 15000		Yes
<b>Objective 2</b>	Definition of training strategy and method		
	- Setting up of tests		This objective is not reached yet, because the tests will be started in the future.
	- Modelisation of contents		This is in phase of definition.
	- The costs are lower or equal to 15000		Yes
<b>Objective 3</b>	Share contents and plan among partner		
	- Cooperation in defining training model and contents		This objective is not reached yet as the tests are not started yet.
	- Coordination of the transfer plan in different context and addressing the training needs		The work is in progress for the tests.
	- The costs are lower or equal to 19000		Yes

### 2.1.3.2 Intermediate evaluation of WP4

	<b>Objective</b>	<b>Intermediate evaluation</b>	<b>Final evaluation</b>
<b>Objective 1</b>	To develop the ICT-training platform	Not reached yet. There is a platform developed, with different alternatives. The platform is under further development and the partner is waiting for approval of the platform.	
	- The website is designed to be interactive	The work is in progress.	
<b>Objective 2</b>	The content of the ICT-training is integrated in the platform	The work is in progress.	
<b>Objective 3</b>	Share contents and plan among partner	/	
<b>Objective 4</b>	The content of the ICT-training platform is known	The work is in progress	

The partner reports that the work is in progress. There are different alternatives of the platform presented, but none has been approved yet. Also the content of the ICT-training isn't fully integrated in the platform yet. The platform is under further development.

#### **2.1.4 Discussion and conclusion**

The work of the different partners is still in progress. Only WP3 has finished yet. The work of WP4 is still in progress and the goals are not achieved yet. They need approval of the model from the other project partners.

As feedback on our process, we can conclude that deadlines are important. To receive the data from the partners on time, we can ask the partners in the future of this project to stick to the deadlines. We believe that our communication is clear and good. We have sent reminders frequently. In the future we can send these reminders earlier to have a higher and quicker response rate.

## **2.2 Internal evaluation of the project in general (process evaluation)**

### **2.2.1 Aim**

The aim is to evaluate the cooperation between the different project partners in order to know if there should be an agreement to change the process. We focus on different topics, such as communication and teamwork.

### **2.2.2 Method**

#### **2.2.2.1 Data collection**

During the meeting in Gdansk (May 2014) all participants had the chance to write down their experiences and suggestions for the future about (1) the communication and (2) the teamwork. All results were anonymous.

### 2.2.2.2 Participants

One responsible per partner was appointed to participate in the 'ICT focused steering group'. All partners have participated with at least one member. In total, 13 project members have participated in this process evaluation.

Partner	Number of participants
SUPSI-DSAN (SWI)	2
Artevelde University College (BE)	2
ECAP (SWI)	1
JEDU (FI)	3
Solidarnosc (PL)	3
MoForm (ITA)	2

### 2.2.3 Results

#### 2.2.3.1 Communication

There is a good communication between the different partners during the meetings. There is a friendly atmosphere with mutual respect and everyone listens to each other. One participant notes that he or she has difficulties to understand other participants. Other participants are suggesting that they want more communication between the meetings to have a better follow-up of the work of the different WP's.

Some partners suggest that e-mail isn't the best way to communicate with each other, because it's difficult to make clear what is expected from others. Other partners say that there is a good level of communication via e-mail.

In this project, there is a Moodle platform, but not everyone is using it. It is not experienced as the best platform to use. Others suggest to use it more.

The participants have also some ideas to improve the communication. They want specific tasks after the meetings and they suggest a monthly videoconference to have a good follow-up. In this way, they also want to learn more about the achievements of the other WP's. In this way every partner knows what the other partners are working on. The videoconferences can be planned by using doodle.

#### 2.2.3.2 Teamwork

In general, all partners say that there is a good and open atmosphere and cooperation. Everyone is motivated. All partners are fully committed. The goal of the project is complex, so one partner thinks we need more time. Others think that the deadlines are realistic.

There is a suggestion to communicate more about the model. During the meetings we can also split the group in different subgroups to work more efficiently.

### 2.2.4 Discussion and conclusion

The communication in this project is perceived as sufficient, with a good communication during the meetings. The atmosphere is good, with good relations between the partners. There is a good team work, all partners are fully committed. We can improve the communication between the meetings. It is necessary that the partners know the results and achievements of each other. Therefore Skype can be used for a videoconference. After this proposal, there have been videoconferences to discuss

problems and topics between different partners. Other partners suggest that Moodle should be used more frequently. This is still a point to discuss in the next meeting.

Our methodology to evaluate the process of the project group will be repeated during each project meeting.

## 2.3 Validation of the developed training model (product evaluation)

As we look at the product that should be evaluated, we can distinguish two different point of views.

**First, the product with its content** and form can be evaluated. **Secondly, the effect of the product** in the field can be measured.

### 2.3.1 Content validity

#### 2.3.1.1 Method

##### 2.3.1.1.1 Participants

Experts were gathered in the ICT sectorial alliance steering group. Each cooperating country in the project was asked to involve 2 experts in the ICT sectorial alliance steering group. See the list of the 10 persons below. All meet the inclusion criteria:

- being a member of an organization dealing with or knowledge about needs of (foreign) domestic care givers or family caregivers
- being interested in the project: motivated to test/exploit/share results
- wanting to cooperate twice in an online questionnaire

Members of project group	Members of the ICT sectorial alliance steering group	
Arteveldehs (BEL) <a href="mailto:Leen.bouckaert@arteveldehs.be">Leen.bouckaert@arteveldehs.be</a>	Kurt Boelens ADMB HR Services kurt.boelens@admb.be	Filip Dejonckheere Arteveldehogeschool Gent Filip.dejonckheere@arteveldehs.be
Jedu (FIN) <a href="mailto:leena.lahdesmaki@jedu.fi">leena.lahdesmaki@jedu.fi</a>	Raija Jauhiainen, manager of the home care in Oulainen Organisation raija.jauhiainen@oulainen.fi	Ira Karvonen, Service manager of the elderly care ira.karvonen@haapavesi.fi
Supsi (ZWI) and Ecap (ZWI) <a href="mailto:filippo.bignami@supsi.ch">filippo.bignami@supsi.ch</a>	Rosaria Sablonier Pezzoli rosaria.sablonier.pezzoli@scudo.ch	Fulvio Manghera Associazione Opera Prima fulvio.manghera@operaprima.ch
Solidarnosc (PL) <a href="mailto:zbyszekkowalczyk@op.pl">zbyszekkowalczyk@op.pl</a>	Jolanta Żoga Polskie Stowarzyszenie na Rzecz Osób z Upośledzeniem Umysłowym najstarszajolanta@poczta.onet.pl	Barbara Kluk House of Social Assistance barbara.kluk@wp.pl
Modena (ITA) <a href="mailto:c.piccinini@modenaformazione.it">c.piccinini@modenaformazione.it</a>	Beltrami Susanna, Comune di Modena, subeltra@comune.modena.it	Giuliana Bulgarelli Azienda Unità Sanitaria locale Modena g.bulgarelli@ausl.mo.it

##### 2.3.1.1.2 Data collection

A digital English questionnaire is developed with the software 'Google docs' (see attachment 2). The open and closed questions of the questionnaire are based on the content of The Model at May 2014. If the participants had problems with the translation, they could contact the responsible member of the project group (see above). The project manager and responsible partner for the content (WP4) (SUPSI-DSAN) were asked to give feedback at the beginning of June.

On the 11<sup>th</sup> of June, the questionnaire was sent to the members of the ICT sectorial alliance steering group. A reminder was sent on the 27<sup>th</sup> of August.

### 2.3.1.1.3 Results

The questionnaire was completed by five people of the ICT sectorial alliance steering group. Also 2 people of the ICT focused steering group completed the questionnaire. These answers will be excluded from analysis because the people don't meet the inclusion criteria for the ICT sectorial alliance steering group.

#### Global

Question	Missing values	Answers			
		Not suitable			Very suitable
Offered as PBL: suitable for MDC?			2	3	
Remarks					
Family of patient: online.			2	2	1
Remarks					
Professional caregivers: online			3	1	1
Remarks	I am in favor of blended learning. A summer course or a short train-the-trainer might be a good solution to guarantee the transfer of expertise but also the international interaction.				

#### Online platform

Question	Missing values	Answers			
		Not suitable			Very suitable
Offered as online platform	3			1	1
Topics					
A. Functional capacity	3				2
B. Learner's life management	4				1
C. Supportive environment	5				
D. Social and health care system	3				2
E. Education system	3		1		1
F. Online communication	3				2

on tools					
G. Links and videos	3				2
H. other	4	1			
If other, specify					

What should be included in the topics above?

Question	Missing values	Answers			
		Certainly not included			Certainly included
Functional capacity					
- physical functional capacity	4				1
- mental functional capacity	4				1
- social functional capacity	4				1
- spiritual functional capacity	4				1
Learner's life management					
- social security system	3				2
- health care system	3				2
- living conditions	3				2
- networks	3				2
- leisure and hobbies	4			1	
- other	4	1			
- if other, specify					
Supportive environment of the functional capacity					
- aseptic	3				2
- safe environment	3				2
- accessible environment	3				2
- esthetic environment	4				1
- other	4	1			
- if other, specify					
Communication tools					
- Skype	3				2
- Chat	3				2
- E-mail	3		1		1
- Other	4	1			
- If other, specify					
Professionals integrated the online platform					
- GP	4				1

- Nurse	4				1
- Occupational therapist	4				1
- Speech therapist	4				1
- Family members	3				2
- Physiotherapist	4				1
- Other	4				1
- If other, specify					

	Missing values	yes	No	If yes, which
Missing items	3		2	
Names clear	3	2		

### Problem based learning (PBL) sessions

Question	Missing values	Answers			
		Not relevant			Very relevant
PBL as concept			1	2	2
Workplace learning				2	3
Realistic cases			1	1	3
Intro: methodology				2	3
Solve problem: self-study			2	1	2
Computer-mediated communication			1	2	2
Synthesis, evaluation				2	3
Final session: 1h30				4	1
Remarks	<p>PBL is a very specific method that must be trained. I is based upon a independent analyses and needs a long process supervision. I agree that using cases and problem analysis is very useful. This can be trained in a short training. Problem solving and creative thinking are methods that can be used if they have a 'focus' on the topic.</p> <p>In my opinion it is important to implement blended learning. My experiences with only distance learning are negative. The face-to-face part of the training is necessary to motive participants but also to create an interactive environment.</p>				

#### 2.3.1.2 Discussion and conclusion

Response rate of 50% is OK though for some questions this rate is far below this percentage. For some topics it impossible to formulate a conclusion. Major conclusions are:

- Experts aren't convinced that an online platform is suitable for supporting the family and the professional caregivers.
- Experts think PBL and workplace learning are relevant.
- Experts agree that it's important to start with an introduction to the methodology of PBL and finish the sessions with a synthesis of the solutions and an evaluation of the learning process.
- The meanings about a session about how to solve a problem in self-study are more divided.

As we look at the process of the data collection and analyses of the content validity, we can formulate some feedback for improvement. For the final evaluation of The Model, we can propose some feedback points in order to improve the response rate

- Involve the project partner to remind and support the members of the ICT sectorial alliance steering group.
- Involving the ICT sectorial alliance steering group more in the project by sending 'updates' on the process of the project, more oral feedback by members of project group, ...
- By redesigning the Google docs as one page and use less grids.

### 2.3.2 Effect evaluation

To get a better view of the usability of the Model, the effect of the implementation of the Model will be made.

#### 2.3.2.1 Method

##### 2.3.2.1.1 Participants

To measure the effect of the Model, the object of evaluation is the Model as it is implemented and tested by the end-users. The end-users can be seen as two groups namely the 'migrant domiciliary caregivers' and the 'members of the professional network'. The latest are those people involved in supporting the domiciliary caregivers through the ICT network (ex. nurse, occupational therapist, social worker,...).

The Model will be tested in Switzerland, Italy and Poland. And about 12 domiciliary caregivers will be involved. There is not yet know how many professionals will be involved in the network.

##### 2.3.2.1.2 Data collection

To measure the effect of the Model, the changes in the field should be highlighted. Therefore there will be two moments of evaluation: before implementation (pre-testing evaluation) and after implementation (post-testing evaluation) of the Model. The pre-testing evaluation can be done during the first meeting of the PBL session. The post-testing phase can be done the last meeting of the PBL sessions. The results of the pre-testing evaluation will be compared with the results of the post-testing evaluation.

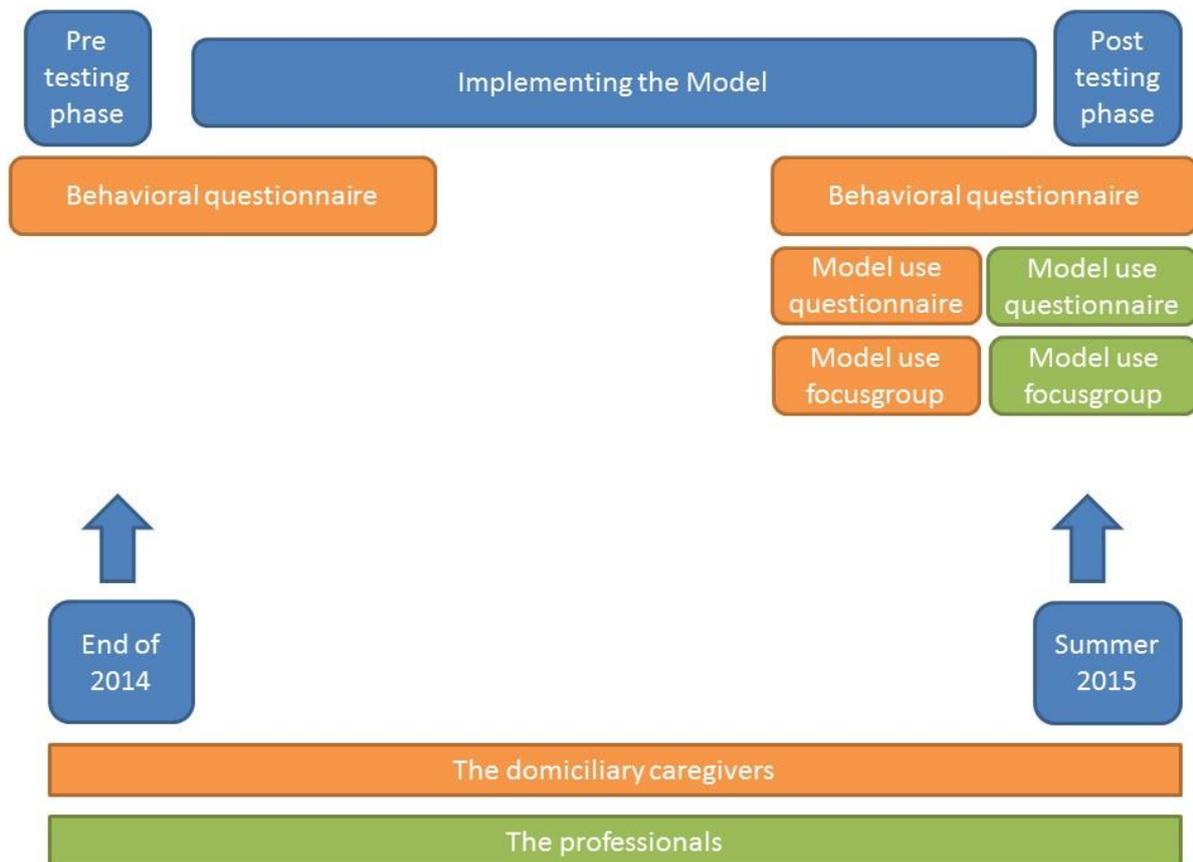
To measure the effect of the Model, triangulation of data collection methods will be used with both end-users groups.

Firstly, quantitative data will be collected in order to measure behavioral changes (problem solving strategies) by the domiciliary caregivers. We will call this the 'behavioral questionnaire'. Quantitative

data on being part of the Model (time investment, usability, etc.), will be asked to the domiciliary caregivers and the professional caregivers. We will call this the 'Model use questionnaire'.

Secondly, qualitative data will be collected in order to measure the opinions, experiences and feelings about the Model. We will call this the 'Model use focus group'.

The figure below gives an overview on the data collection.



#### 2.3.2.1.2.1 *The behavioral questionnaire*

This English online questionnaire (by Google docs) will be based on the PBL theory. We will present a real life problem linked to their job as a domiciliary caregiver. And ask them how they would solve this problem, where they would get their information from to resolve this problem. The data analysis will be done in excel.

#### 2.3.2.1.2.2 *The Model use questionnaire*

This English online questionnaire (by Google docs) will contain closed and short open questions. For example we will present different theorems and use a Likert scale to present the possible answers. The data analysis will be done in excel.

#### 2.3.2.1.2.3 *The Model use focus group*

In each participating country, two focus groups will take place at the end of the testing phase: a group of domiciliary caregivers and a group of professional caregivers. In the way, both groups can formulate their opinions and feelings freely. Each focus group is led by the responsible group member of the TOI project. Each focus group will be held in the language of the participating country

and will in advance be discussed with the participants of the focus groups. Each focus group will last for a maximum of 1 hour.

The topics which will be discussed are generated from a previous research (Mollenkopf e.a., 2010)<sup>1</sup>. Four main topics will be discussed: structural- and emotional barriers, lack of information and support and drives. For each main topic the starting question will be formulated. All material for conduction the focus groups will be gathered in a 'working package for the Model use focus group'.

Each focus group will be audio-taped and can be used by the TOI group member to make a summary in English. The TOI group member is responsible to deliver a summary in a for seen format.

The analysis of the data will be done by qualitative method (three method) by two researchers independly from each other (Ruben Vanbosseghem and Leen Bouckaert).

### ***2.3.2.2 Results***

The pre-testing phase has to start moreover up until now there are no data our results known.

### ***2.3.2.3 Discussion and conclusion***

In this section, the results will be summarized and compared with earlier research (Mollenkopf e.a, 2010). Conclusion concerning the process of product evaluation will be made as well as conclusions about the effectiveness of and experiences with the Model.

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<sup>1</sup> Mollenkopf, H., Kloé, U., Olbermann, E., Klumpp, G. (2010) The Potential of ICT in supporting domiciliary care in Germany, Luxembourg: Publications Office of the European Union.

### 3 Points of action: summary

<b>Points of action</b>	<b>Timing</b>	<b>Responsible partner</b>
Process evaluation of WP on time	Each intermediate or final evaluation	Arteveldehogeschool will manage missing values more
Content validity: improving response rate	August 2015	Arteveldehogeschool coaches the other partners Arteveldehogeschool redesigns the Google docs

## **4 Attachments**

### **4.1 WP goals and timing**

### **4.2 Questionnaire to measure the content validity**