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Patient Guidance Service (PGS), safety and healthcare record information reuse Combination of CP & CSA



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WP4 – Evaluation

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Abstract (for dissemination)	The present documents aims at describing the assessment process that was implemented during DECIPHER PCPC Phase 1.  The document s constituted two main areas: one related to the monitoring activities, related to the tasks and responsibilities of the Monitoring Team; one related to the evaluation of the proposals conducted by the Expert Board, which resulted in the selection of the six proposals which accessed Phase 2.

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# 1 Introduction

DECIPHER PCP is a project that aims at challenging companies and developers in designing mobile technologies that will provide an updated view of personal health data and a tool for long-term conditions self-management. Support for cross-border health is a specific design target for these technologies.

DECIPHER PCP is making use of the Pre-Commercial procurement (PCP) approach to steer the development of novel technological solutions from early R&D stages to the performance of the Proof of Concepts of the resulting services. Through this process the consortium is aiming to align the supply side with the demand side and at the same time improving quality and efficiency of DECIPHER procuring authorities healthcare services through the adoption of technologies co-created with the industry.

DECIPHER PCP process will take place over 3 Phases: Design (Phase 1), Prototype (Phase 2) and Proof fo Concepts (Phase 3). Prior to PCP, a Need Assessment Phase (Phase 0) was conducted to identify end-users needs (patients and healthcare professionals) and to define functionalities of innovation.

The present document aims at describing the activities conducted by DECIPHER PCP Consortium for conducting evaluation activities planned for Phase 1 and for achieving the objectives set for task T4.3 Phase 1: Evaluation report.

# 2 Phase 1 Executive Summary

During Phase 1- Design, evaluation process will assess proposals received from Bidders for the fist time. During this Phase, those involved in the Monitoring Team and the Expert Board adopted the evaluation framework and monitoring tools defined in the project preparatory stages in order to increase the alignment between the Bidders and the project expected outcomes and to insure an objective and impartial evaluation of the proposals.

The two process, the evaluation and the monitoring, have been designed with the aim of allow for an interaction between the two. In particular, the work of the Monitoring Team will produce information that will support the evaluation of the proposals. This information is generated within the context of the proposals test conducted through end users (patients and healthcare professionals). Given the early stage of its development, proposals were tested by end users using a wireframe description provided by the Bidders themselves.

At Phase 1, the evaluation process led to the selection of 6 proposal (within the total of 9) to access Phase 2. The selection relied on the awarding criteria included in the framework presented ion the Invitation to Tender (D2.2, Annex 4). The 6 selected proposals resulted as those with the best overall performance and those that were more appreciated from involved end users.

# 3 Objectives

DECIPHER PCP's evaluation process aims at adapting the assessment frameworks used in the innovative procurement setting to the projects' specificities, both under the clinical and the operational point of view. This means that in DECIPHER PCPC the typical pre-commercial procurement settings to the nature of the technology the project aims at generating. This could be described as a consumer technology, helping clinicians and patients with type II diabetes in their life and work. For this reason, DECIPHER PCP's evaluation process is characterised by a strong focus on involving potential end users in each Phase, in order to provide developers and evaluators with information on use experience that may serve for the proposals development and their assessment.

Phase 1 represented the first implementation of DECIPHER PCP framework of evaluation. Therefore, both the Expert Board and the Monitoring Team will contribute to the testing of the framework, generating indication for its development for future application and contributing to the project's Lessons Learned.

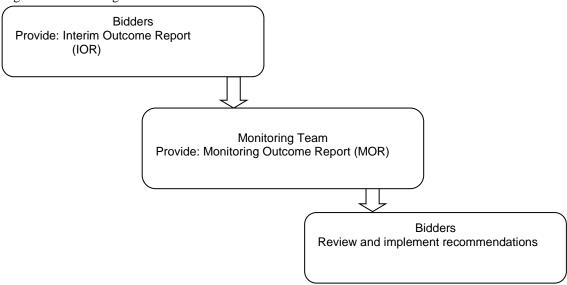






Before the delivery to the Experts Board, the proposals have been submitted in a preliminary version to the Monitoring Teams, which were in charge of conducting an assessment in order to review the progress of each proposal and provide further guidance for development before the final delivery. The activities of the Monitoring Teams are very well described by the below graph, which also outlines the flow of activities between the Teams and the Bidders.

Figure 1 - Monitoring Team workflow



The Interim Outcome Report (IOR) is a document submitted by the Bidders to inform the Monitoring Team' members regarding to which extent the developed technology goes beyond the state of the art, how it comply with each's Phase expected outcojme of development and its commercial and technical feasibility.

The Monitoring Outcome Report (MOR), instead, is a document produced by consuses of all members of the Monitoring Team in which it is assessment progress of the bid and any recommendation the Monitoring Team considers mandatory to ensure their good progress. Results of the assessment progress can be classified into: good, acceptable, unsuccessful and unsatisfactory. Definitions of these categories of assessment are:

<u>Good progress:</u> Bidders proposed solution and current achievements meet the objectives of the Phase and no recommendations are needed.

<u>Acceptable progress:</u> Bidders proposed solution and current achievements are aligned with the objectives of the Phase but recommendations are required.

<u>Unsuccessful progress:</u> Bidders proposed solution and current achievements reveal that the proposed technologies either do not go beyond the state of the art or lack of technical and commercial feasibility. However, where the Monitoring Team considers the aforesaid solution as a reversible one, it may make the recommendations it considers appropriate. Otherwise, when the Monitoring Team understands that the solution is not reversible, it shall recommend either the exclusion of the Bidder or not having him invited to the next phase.

<u>Unsatisfactory progress</u>: Bidders proposed solution and current achievements do not comply with the contractual commitments. Nevertheless, as above, when the Monitoring Team considers the solution as a reversible one, it may make the recommendations it considers as appropriate. Otherwise, when the Monitoring Team understands the solution is not reversible, it shall recommend either the exclusion of the Bidder or not having him invited to the next phase.







# 4 Phase 1 evaluation and monitoring activities

## 4.1 Monitoring activities

As described above, 3 Monitoring Teams were formed in order to conduct a pre-final delivery assessment regarding on the proposals development with respect to the expected outcomes of Phase 1.

Each Monitoring Team was formed by:

- a representative of a Procuring Entity;
- 2 experts
- at least 3 potential end users, i.e. an healthcare professional or a diabetes II patient.

3 Monitoring Team were formed by random association in June 2015 and each Team was assigned to 3 proposals to assess. In July 2015, the 3 Monitoring Teams, each one headed by a representative of a Procuring Entity, received a description of the proposals in a wireframe version. A wireframe is a two-dimensional illustration of a software page's interface that specifically focuses on space allocation and prioritization of content, functionalities available, and intended behaviours. It was decided to ask Bidders to produce a wireframe because the level of development related to Phase 1 wouldn't allowed for a more advanced version of the proposal, allowing for interaction between the solution and a potential end user. However, wireframe had the advantage of promoting a first formalisation of the proposed solutions in such a way that it would have been possible for the Monitoring Teams to provide development guidance to the Bidders.

Proposals' wireframe was used for the assessment of the Monitoring Teams. Assessment was two-fold: on one side, end users assessed each proposals under the perspective of ease of use and commercial feasibility; on the other, experts and the Procuring Entity representative evaluated the proposal under a more comprehensive perspective. End users were asked to assess the proposals wireframe under the perspective of their acceptance and their potential interest. The information gathered through this process was also used by the expert board as additional insights for evaluating the proposals' Commercial Feasibility. The aim of conducting this type of assessment is also to to extract ptential end users feedback on proposals' ease of use, design, satisfaction and areas which can be associated to the concept of user experience.

During the evaluation, end users went through group semi-structured interviews, which were managed by a usability expert, who acted as a supervisor, and an observer.

Interviews were structured as following:

- first, the supervisor introduce the proposal to the end user, describing its structure, logic and main functions;
- second, the supervisor asked to each potential user to answer a questionnaire,
- finally, the supervisor may ask the user to provide more information regarding their experience.

Potential user population invoved in the Monitoring Team activities were selected in order to guarentee a high level of familiarity with recent technologies, especially smartphones and portable devices (tablet, portable computer, etc...). This criteria were fundamental to insure that the participants had the skills and epereince for assessing the proposals' wireframe.

Information extracted from this process were then sent to the other members of the Monitoring Team. It must be clarified that these informations generated from the process were not formally included assessment conducted by the Monitoring team, i.e., end user feedback didn't constituted a formal evaluation criteria within DECIPHER PCP assessment process.

The questionnaire used for end user assessmeen is based on the following evaluation items:

- The sequence of steps to perform (steps to execute in order to perform the proposal's functions, i.e., alarm function, data entry function) is clear
- Once fully developed, the service will be useful
- The proposed service will meet my needs







To express their feedback regarding each associated proposal, users will be asked to assess a number of statements using a 5-point Likert scale. The same approach will be used in Phase 2.

The Monitoring Teams activities have generated the MOR, which have been delivered to each Bidder with the assessment result and additional guidance coming from the Teams regarding the development of the proposals for the final delivery to the Expert Board.

## 4.1 Evaluation activities

The proposals final evaluation and selection for access to Phase II was conducted by the Expert Board. The main responsibilities of the board were:

- assessing, upon the proposal of the Tendering Board, the technical offers and End of Phase reports.
   When assessing the End of Phase reports, the Expert Board was able to rely on the indications and the recommendations provided by the Monitoring Team through the MOR;
- producing a report of each of those proposals or reports, including a scoring proposal, according to the award criteria stated in ANNEX IV;
- supporting the Tendering Board at any stage of the DECIPHER PCP Procedure, replying timely to its requests of help, making the clarifications or analysis it can require.

DECIPHER PCP Evaluation framework for the Expert Boards is based on 5 main groups of criteria (Tabla 1):

- Functionality;
- Innovation;
- Quality
- Technical feasibility
- Financial feasibility
- Price

In some cases, a group is made of different criteria, which aim at exploring the different aspects included in the dimension assessed (e.g., I FUNCTIONALITY). In other cases, groups are a single dimension evaluation (II INNOVATION). There is also the case of single-dimension criteria that rely on a complex set of multi-dimension information generated by a parallel evaluation process, as for VI COMMERCIAL FEASIBILITY.







Table 1 - DECIPHER PCP awarding criteria scoring table

E	ECIPH	ER PCP awarding cr	iteria	scorin	g table							
			Phase 1			Phase 2	a		Pha	ase 3		
			Score*	Max. Points	Min. Points Exclusión Criteria	Score*	Max. Points	Min. Points Exclusión Criteria	Score*	Max. Points	Min. Points	Exclusión Criteria
	_											
	I	FUNCTIONALITY		25	10		21	10		20		10
		Basic functions		20			16			16		
		Secure access to PA-PHR-S	10	5		10	4		10	4		
		Share information	10	5		10	4		10	4		
		Care management	10	5		10	4		10	4		
		Inform in emergency situations	10	5		10	4		10	4		
		Design functions		5			5			4		
		Provide user interface accessibility	10	1		10	1		10	1		
		Provide data availability and redundance	10	2		10	2		10	1		
		Satisfy technical design requirements	10	1		10	1		10	1		
		Satisfy business model design requirements	10	1		10	1		10	1		
l		requirements	10	ı		10	ı Tarihin da		10	ı		
	11	INNOVATION	1	1	1	1	1	1	1	1		1
	ш	IMPACT OF INNOVATION	10	5	2	10	5	2	10	5		2
	IV	QUALITY		15	8		15	8		15		8
		Quality in										
		Management	10	8		10	8		10	8		





Public



		Score*	Max. Points es	Min. Points T Exclusión Criteria	Score*	Max. Points	Min. Points Exclusión Criteria	Score*	Max. Points d	Min. Points sase	Exclusión Criteria
	Quality of Risk Management	10	7		10	7		10	7		
v	TECHNICAL FEASIBILITY	10	20	8	10	20	12	10	20	· 1	16
VI	COMMERCIAL FEASIBILITY	10	20	8	10	20	12	10	20		16
VII	FINANCIAL FEASIBILITY	10	9	5	10	8	5	10	4		2
VIII	PRICE		5			10			15		

The development of this framework was based on four principles:

- 1. The scoring will be made according to an absolute scale, meaning that several Bidders can receive the same score and that the score a specific bidder receives is not affected by the scores other Bidders have received.
- 2. Successful Bidders will be duly notified on the contract signature.
- 3. Contractors will be expected to finish their project in time. In case the projects are not finished by the deadline, the Contractors will not be entitled to submit a tender for the next Phase.
- 4. The same criteria and evaluation method will be subsequently used across all the phases.

By pursuing these principles, DECIPHER PCP management and coordination team aimed at respecting the requirements set by the European Commission for a fair competition in public procurement and the assessors guiding principles defined in DECIPHER PCP's Guidelines for Assessors document.

# 5 Results

#### 4.1 Evaluation results from the monitoring activities

Alteraid SL

The Monitoring Outcome Report of Alteraid's proposal highlighted:

- 2 good, 4 acceptable and 2 unsuccessful marks for the *Functionalities* criteria;
- 3 unsuccessful marks for *Innovation*;
- 4 unsuccessful marks for *Impact of Innovation*;
- 1 unsatisfactory, 1 unsuccessful marks for *Quality*;
- 1 unsuccessful marks for Financial Feasibility;







• 1 Acceptable mark for Technical Feasibility and Commercial Feasibility

#### Here some comments from the MOR

### Basic Functions – Manage Treatments: Acceptable

"No description on how the function works. It seems that just exchange of documents is envisaged to support treatments. No proactive approach. Identify clearly which exiting elements are used in the Background section. No details about the implementation."

#### Design Functions – Satisfy Business Model Design requirements: Good

"Fine taking into account existing Accessibility guidelines. Support centre for users. No details on the platform improvement process to adapt to users needs."

#### Quality Management - Managerial quality factor: Unsatisfactory

"Vague project management plan. Mixes dissemination and marketing actions with project management. Risk of not being capable of managing properly by lack of planning."

#### E-Results

The Monitoring Outcome Report of E-Results's proposal highlighted:

- 3 good, 5 acceptable marks for the *Functionalities* criteria;
- 8 good, 2 acceptable marks for *Innovation*;
- 1 acceptable marks for *Impact of Innovation*;
- 4 good marks for *Quality*;
- 1 Acceptable mark for Technical Feasibility, Financial Feasibility and Commercial Feasibility

#### Here some comments and recommendation from the MOR

### Innovation - Innovative algorithms: Acceptable

"Would like to see reference in the contractors' IOR to section 1.7 of the CB "Horizon Scan". Has the contractor fully assessed the current state of the art in terms of IP and how this could affect their approach? Stable clinical approach."

#### Functionalities - Provide User interface accessibility: Good

"User feedback on the homepage: "The service seems designed for a tablet or a laptop. The information presented in the homepage would not fit into a smartphone screen."

Recommendation: Validate that the service is compatible with smartphone display, particularly for patients with visual impariment. Concepts are good. Implementation to be assessed."

#### Financial feasibility: Acceptable

"It is important that the contractors make reference to the Business Case section of the CB (1.4.2) in their IOR. Of particular value would be references to the CODE-2 study and Becker (2013), page 24 of the CB, with respect to the decline in use of smart 'phone apps after 2 months. Can the contractor describe the features of their technology which address this challenge?

DECIPHER is a technology particularly applicable to people travelling in the EU. The contractor's business case should at minimum make reference to the information in the CB on pages 28/29 relating to numbers of people travelling from one EU member state to another.

The contractors should demonstrate that they understand or have validated the potential number of users and the factors which will encourage long term use of the technology.







The business case should suggest mechanisms by which the proposed solution would contribute to the reduction of the healthcare burden on diabetes 2 incurred by the procuring authorities. Potential mechanisms mentioned in the CB are increasing secondary adherence to treatment and supporting patient's self-care and self-monitoring. As an example an outcome mentioned in the CB which would reduce the healthcare burden on the procuring authorities would be reducing hospitalisations for diabetes sufferers travelling in the EU."

#### Gnomon Informatics/ iUZ Technologies

The Monitoring Outcome Report of Gnomon Informatics/ iUZ Technologies' proposal highlighted:

- 9 good, 4 acceptable marks for the *Functionalities* criteria;
- 7 good, 4 acceptable marks for *Innovation*;
- 2 good marks for *Impact of Innovation*;
- 10 good marks for *Quality*;
- 1 good mark for Technical Feasibility, Financial Feasibility and Commercial Feasibility

Here some comments and recommendation from the MOR

Functionalities - Provide User interface accessibility: Acceptable "Clarify why it refers in particular to users with disabilities."

Functionalities - Satisfy Technical design requirements: Acceptable

"Clarify if interaction with medical devices' software and hardware will be possible. If so, please specify how"

#### **ISBM**

The Monitoring Outcome Report of ISBM's proposal highlighted:

- 3 good, 10 acceptable marks for the Functionalities criteria;
- 8 good, 4 acceptable marks for *Innovation*;
- 1 good marks for *Impact of Innovation*;
- 2 acceptable marks for *Quality*;
- 1 acceptable mark for Technical Feasibility, Financial Feasibility and Commercial Feasibility

Here some comments and recommendation from the MOR

Functionalities - Provide User interface accessibility: Acceptable "Clarify why it refers in particular to users with disabilities."

Quality – Quality in management: Acceptable

"Lack of explanation on bidder's methodologies aimed to guarantee the quality in the Decipher project management (as described in Annex 4 page 13). We suggest to dedicate a specific part to Quality in Management. There are no elements to assess that Quality in Management is beyond the state of the art or is using background. We suggest to leave empty or write n/a."

Commercial Feasibility: Acceptable







"There are no elements to assess that Commercial Feasibility is beyond the state of the art or is using background. We suggest to leave empty or write n/a. Analysis should be stricter related to the issues suggested in Annex 4 page 14"

#### Linkcare

The Monitoring Outcome Report of Linkcare's proposal highlighted:

- 5 good, 6 acceptable and 1 unsatisfactory marks for the Functionalities criteria;
- 2 acceptable and 4 unsatisfactory marks for *Innovation*;
- 1 unsuccessful and 2 unsatisfactory marks for *Impact of Innovation*;
- 2 unsuccessful and 2 unsatisfactory marks for *Quality*;
- 1 good, 1 acceptable mark for *Technical Feasibility*;
- 1 acceptable mark for Financial Feasibility.

Here some comments and recommendation from the MOR

#### Innovation – Advances in interoperability: Unsatisfactory

"The contractor needs to provide this information for assessment. The contractor needs to give more detail on who will respond to events. It is not clear in the IOR whether the professional or team would be a member of Linkcare staff (does Linkcare have the necessary medical knowledge in-house?) or would the response be by a healthcare professional from the procuring health system?."

#### Impact of innovation: Unsatisfactory

"How does the technology increase treatment adherence? How can it reduce the number of times patients run out of meds? DECIPHER is a technology particularly applicable to people travelling in the EU. The contractor's business case should at minimum make reference to the information in the CB on pages 28/29 relating to numbers of people travelling from one EU member state to another.

The contractors should demonstrate that they understand or have validates the potential number of users and the factors which will encourage long term use of the technology.

The contractors should make reference to potential revenue streams. Information is available in section V (page 38) of the CB which may be of assistance in developing a model. The assessors would like to see the contractor's analysis of the potential strengths and weaknesses of these revenue streams and the reasoning behind the decision to adopt or reject. Of particular interest would be innovative models which go beyond those described in the CB.

The business case should suggest mechanisms by which the proposed solution would contribute to the reduction of the healthcare burden on diabetes 2 incurred by the procuring authorities. Potential mechanisms mentioned in the CB are increasing secondary adherence to treatment and supporting patient's self-care and self-monitoring. As an example an outcome mentioned in the CB which would reduce the healthcare burden on the procuring authorities would be reducing hospitalisations for diabetes sufferers travelling in the EU"

### Commercial Feasibility: Acceptable

"There are no elements to assess that Commercial Feasibility is beyond the state of the art or is using background. We suggest to leave empty or write n/a. Analysis should be stricter related to the issues suggested in Annex 4 page 14"

Nabelia/ SGPT

The Monitoring Outcome Report of Nabelia/ SGPT's proposal resulted in:





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- 8 good, 4 acceptable marks for the Functionalities criteria;
- 5 good, 3 acceptable and 4 unsatisfactory marks for *Innovation*;
- 1 good marks for *Impact of Innovation*;
- 1 good,1 acceptable and 2 unsatisfactory marks for *Quality*;
- 1 unsatisfactory mark for Technical Feasibility, Financial Feasibility and Commercial Feasibility.

Below some comments and recommendation from the MOR are reported

Innovation – Innovative Concepts: Acceptable

"More information is expected for the usage f the FHIR server Farm (concept)"

Technical Feasibility: Unsatisfactory

"Technical feasibility (as described in Annex 4 page 13) has to be written."

Quality – Quality in management: Acceptable

"In the specified page there is not a full treatment of the required issue"

#### Nextage srl

The Monitoring Outcome Report of Nextage srl's proposal resulted in:

- 3 acceptable and 5 unsuccessful marks for the *Functionalities* criteria;
- 2 good, 5 acceptable, 4 unsuccessful and 1 unsatisfactory marks for *Innovation*;
- 2 acceptable, 1 unsuccessful for *Impact of Innovation*;
- 4 acceptable marks for *Quality*;
- 1 good mark for *Technical Feasibility*;
- 1 acceptable mark for Financial Feasibility and Commercial Feasibility.

Below some comments and recommendation from the MOR are reported

Impact of Innovation – Exploitation of Single Modules: Unsuccessful

"Identify possible modules easily integratable to other systems. No info on what products will be the modules exploited."

Functionalities - Manage treatments: unsuccessful

"Reminders and notifications. Insufficient details. No info on drug adverse interactions, poly-pharmacy, offline alerts, etc."

Commercial Feasibility: Acceptable

"Good market research. Has obtained good score in the usability of the service. Lower score in the rest of the questions related with the sequence of steps to perform and the needs of the users.

Analysis focused on diabetes management. Reliance on Health Care Provider subscription and Developer partners."

Nissatech srl







The Monitoring Outcome Report of Nissatech srl's proposal resulted in:

- 31 good and 2 acceptable marks for the *Functionalities* criteria;
- 9 good marks for *Innovation*;
- 4 good and 1 acceptable for *Impact of Innovation*;
- 7 good and 2 acceptable marks for *Quality*;
- 6 good mark for Technical Feasibility;
- 6 acceptable mark for *Financial Feasibility*;
- 2 acceptable mark for Commercial Feasibility.

Below some comments and recommendation from the MOR are reported

#### Functionalities - Provide Easy Access User Interface: good

"User feedback from wireframe: "The general page design is not user friendly. The first impression is that of an application made for patients with high familiarity with mobile technologies."

Assessor recommendation: The contractor should test the interface with users of different technical ability. The assessor's note that the user interface is under development and section F5, page 13 of the contractor's IOR states that colour schema visual effects and the size of the graphical elements will be adaptable to user preferences.."

Impact of Innovation – Collecting and processing continually health-relevant information (activity, heart rate)

2. Wearables-based physical-treatment monitoring / adherence: Good

"It is good that the contractor is considering including wearables in the design. This is an enhancement on the brief and offers potential beyond state-o- the-art capability so we are enthusiastic about this. However, the contractor should ensure that the project is not overcomplicated and can still achieve the requirements of the CB for patients who choose not to use wearables or whose compliance with long term use of wearables is low.

New approach for using wearables – good.

In addition to activity monitors, the contractor might consider interfacing with clinical diagnostic devices such as glucometers which have a high degree of relevance to diabetes sufferers."

#### Financial Feasibility- Financial Plan: Acceptable

"Accurate financial plan including own investments for commercialisation."

### Socialdiabetes SL

The Monitoring Outcome Report of Socialdiabetes's proposal resulted in:

- 2 good, 5 acceptable and 1 unsuccessful marks for the Functionalities criteria;
- 3 good, 2 acceptable and 7 unsatisfactory marks for *Innovation*;
- 4 acceptable marks for *Impact of Innovation*;
- 5 acceptable marks for *Quality*;
- 1 acceptable mark for Technical Feasibility;
- 2 good and 1 unsuccessful mark for Financial Feasibility;
- 2 good and 1 acceptable mark for *Commercial Feasibility*.







Below some comments and recommendation from the MOR are reported

Functions – Satisfy Technical design requirements: Acceptable

"Use of 3rd party server services (Google App Engine). No possibility of a custom server."

Innovation - Advances in methods for capturing, transmitting, storing, retrieving, manipulation: Unsatisfactory "Data capture and synchronization not novel."

Commercial feasibility: Good

"Very good qualification from the End Users"

# 4.2 Evaluation results from the Expert Board's activities

The Expert Board were responsible for the selection of the proposals allowed to access to Phase 2 of DECIPHER PCP. The process was guided by the Awarding criteria table presented in section 4.1 (Table 1). The results for the evaluation process are reported below in Table 2.







Table 2 – Expert Board evaluation results

			Alteraid	E-results srl	GNOMON / iUZ Technologies Lda	ISBM
I		FUNCTIONALITY				
		Basic functions				
		Secure access to PA-PHR-S	8	6	8	4
		Share information	8	6	8	4
		Care management	8	6	8	6
		Inform in emergency situations	6	8	8	6
		Design functions				
		Provide user interface accessibility	8	8	8	4
		Provide data availability and redundance	8	4	8	6
		Satisfy technical design requirements	8	8	8	6
		Satisfy business model design requirements	6	6	6	4
II		INNOVATION	1	1	1	1
III	I_	IMPACT OF INNOVATION	8	6	8	6
IV		QUALITY				
		Quality in Management	8	6	8	6
		Quality of Risk Management	8	6	6	6







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		Alteraid	E-results srl	GNOMON / iUZ Technologies Lda	ISBM
v	TECHNICAL FEASIBILITY	8	6	8	6
VI	COMMERCIAL FEASIBILITY	8	4	8	4
VI	FINANCIAL FEASIBILITY	8	6	6	6







Table 2 – Expert Board evaluation results (continue)

			Linkcare	Nabelia	Nextage	Nissatech
I		FUNCTIONALITY				
		Basic functions				
		Secure access to PA-PHR-S	6	6	10	8
		Share information	8	6	8	8
		Care management	8	8	8	8
		Inform in emergency situations	8	4	10	8
		Design functions				
		Provide user interface accessibility	8	8	8	6
		Provide data availability and redundance	6	6	8	8
		Satisfy technical design requirements	8	6	8	10
		Satisfy business model design requirements	6	6	6	4
п		INNOVATION	1	1	1	1
111	[	IMPACT OF INNOVATION	8	4	8	8
IV		QUALITY				
		Quality in Management	8	4	6	8
		Quality of Risk Management	4	6	6	8







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			Linkcare	Nabelia	Nextage	Nissatech
v		TECHNICAL FEASIBILITY	8	6	8	6
VI	Į.	COMMERCIAL FEASIBILITY	8	6	8	6
VI	ı I	FINANCIAL FEASIBILITY	8	6	6	6







Table 2 – Expert Board evaluation results (continue)

		Socialdiabetes
I	FUNCTIONALITY	
	Basic functions	
	Secure access to PA-PHR-S	4
	Share information	6
	Care management	8
	Inform in emergency situations	6
	Design functions	
	Provide user interface accessibility	8
	Provide data availability and redundance	6
	Satisfy technical design requirements	4
	Satisfy business model design requirements	4
II	INNOVATION	1
III	IMPACT OF INNOVATION	6
IV	QUALITY	
	Quality in Management	6
	Quality of Risk Management	6





			Socialdiabetes
V		CHNICAL EASIBILITY	6
VI		OMMERCIAL EASIBILITY	6
VI	I	NANCIAL EASIBILITY	6







Given the above mentioned results, the proposals reached access to Phase II are:

- 1. Linkcare
- 2. Nextage
- 3. Gnomon
- 4. Alteraid
- Nissatech
- 6. Eresults

The proposals which were excluded, instead, are:

- Nabelia
- 2. Social diabetes
- 3. ISMB

# 6 Next steps: activities and schedule

#### Phase 2: Prototype

Phase 2 begun on March 2016 and will finish on November 2016. During Phase 2- Prototype, those involved in the Monitoring Team and the Expert Board adopted the evaluation framework and monitoring tools defined in the project preparatory stages in order to increase the alignment between the Bidders and the project expected outcomes and to insure an objective and impartial evaluation of the proposals.

The two process, the evaluation and the monitoring, have been designed with the aim of allow for an interaction between the two. In particular, the work of the Monitoring Team will produce information that will support the evaluation of the proposals. This information will be generate with the proposals test conducted through end users (patients and healthcare professionals). In this stage proposals will be tested by end users using a prototypes provided by the Bidders themselves.

At Phase 2, the evaluation process led to the selection of 2 proposal (within the total of 6) to access Phase 3. The selection relied on the awarding criteria included in the framework presented ion the Invitation to Tender (D2.2, Annex 4). The 2 selected proposals resulted as those with the best overall performance and those that were more appreciated from involved end users.

During Phase 2, activities of evaluation and monitoring will be carrying out to provide information to both Monitoring and Evaluations Teams. Following sections will describe the objectives and the activities

#### **Objectives**

#### 1) Evaluation

The aims of the evaluation are to verify to what extent the main features exhibited by the prototype meet the functional and performance requirements set forward by the public purchaser for the desired solution. The main output of this phase normally includes a prototype specification and demonstration.

#### 2) Monitoring







To provide information of end users' perspective (patients and physicians) that can be useful for assessing proposals' commercial feasibility through semi-structured interview. The results of interviews will be part of the Interim Outcome Report of Monitoring Outcome Report and support the evaluation proposals

#### Activities and schedule Phase 2

Figure 2 shows the main events will happen in Phase 2:

Figure 2- Phase 2 main events related to the Evaluation process



#### **Evaluation activities Phase 2**

Phase 2 represents the second evaluation of the submission produced by Bidders. Awarding criteria of Phase 2 are the same of Phase 1, but weight of each questions are different. These evaluation will take place during August 2016 and will follow the awarding criteria table presented previously and adopted by the Expert Board in Phase 1. The main difference will be represented by the different weights assigned to the criteria.

Before the delivery of the final version of bid prototype proposal, the proposals will be submit to the Monitoring Team, which is in charge of conducting a preliminary assessment in order to review the progress of each proposal with respect to the defined specifications and provide further guidance for development before the delivery. The 3 Monitoring Teams received the proposals prototype. Proposals' prototype test will be performed during July 2016, in the 4 month after beginning Phase 2.

With the proposals' prototype a usability test address to end users, such as physicians and diabetic patients, will be carry out in . End users will be identified by three procuring authorities in the three countries of reference: Italy (Florence), Spain (Barcelona), United Kingdom (Manchester).

In PHASE 2 – PROTOTYPE the Monitoring Team will comprise 18 external potential users. Each Procuring Authorities will directly contact 2 physicians, offering to be part of the Monitoring Team. Then, the selected physician will contact 2 patients under her/his responsibility. Selected users should respect the criteria exposed in the previous section. Each potential user, either doctor or patient, will be randomly assigned to a single proposal. Therefore, each proposal will receive six feedbacks. All enduser will be asked to assess the following statements with a 5-point Likert scale (all arrangements and instructions to develop the monitoring test of Phase 2 are described in DEPHICER Monitoring Plan):

- The prototype provides clarity of wording
- The prototype's data and information visualization is clear
- It is easy to move through the prototype and to return to previous tasks
- The prototype presents information in logical order
- The sequence of screens is clear
- Navigation tools (menu, labels, cursors) are consistent
- When using the prototype, it is easy to return to previous tasks
- It is easy to remember how to perform tasks through the prototype



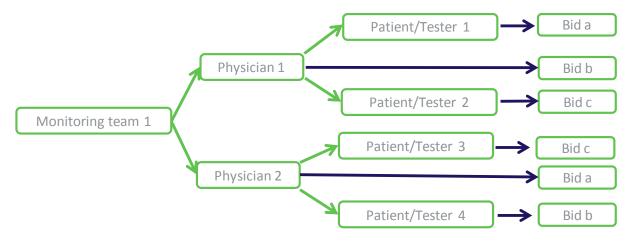






- The prototype provides timely feedback about all processes
- The prototype helps the user in getting easily out of an undesirable state
- The prototype is pleasant to use
- The prototype works the way I want it to work
- The prototype is useful
- The prototype meets my needs

Figure 3. Phase 2: Selection of testers and association to proposals for evaluation



## Phase 3: Proof of concept

# **Objectives**

# 1) Evaluation

The evaluation aims to verify and compare the performance (interoperability, scalability, etc) of different solutions in simulated real-life operational conditions of the targeted public service. The main output of this phase usually includes a test product specification, a field test and an updated cost/benefit evaluation.

# 2) Monitoring

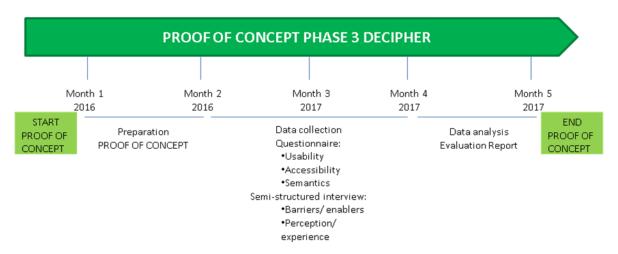
Monitoring activities for Phase 3 are outlined in the figure below







Figure 4- Phase 3 main events related to the Evaluation process



In this case, in each country 24 patients with chronic conditions and ability of using mobile solution and 6 doctors will be involved in the monitoring activities. As for the previous Phases, the end users will test the solution and will be asked to complete a questionnaire. The questionnaire will contain items that end users will rank according to a Likert scale. The questionnaire will be the following.

## Learnability:

- The service provide clarity of wording
- The service's data grouping method and information visualization is clear
- It is easy to learn to use the service
- I quickly became skilful with it
- The service uses a simple and natural dialoguing approach

# – Efficiency:

- The service presents information in logical order
- The sequence of screens is clear
- Navigation tools (menu, labels, cursors) are consistent
- When using the service, it is easy to return to previous tasks
- It is easy to remember how to perform tasks through the service
- The service will help me in being more effective in following my treatment
- The service will help me in better controlling my health status
- The service meets my needs
- The service offers the possibility to set preferences
- The service has a flexible data entry design
- Users support







- The service provides timely feedback about all processes
- The service helps the user in getting out of an undesirable state easily
- The service provide the user with the possibility to send feedback
- I can recover from mistakes quickly and easily
- The service diagnoses the source and cause of a problem and suggests a solution
- The service offers an effective package of customer support tools (e.g., websites, tutorials, Question & Answer support, offline help tools, user manual)
- The support package allows for an easy identification of solutions for problems that arise in the usage
- Satisfaction/User experience:
  - The service offers a easy and constant access to the health records I need to consult for monitoring my treatment/patients
  - The service is pleasant to use
  - The service works the way I want it to work
  - The service is satisfying
  - The service meets my needs
  - The service is useful
  - I would recommend the service to a friend

In order to have a deeper understating of the use experience, 6 patient semi-structured interviews will be conducted.



