http://vitlab-resater.eu

Experts Committee Final Report

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1.- Purpose of this document

The major aim of this text is to summarize and to assess the activities carried out in the context of the e-RESATER project.

e-RESATER is a project belonging to the INTERREG IV B program. The project has run for 30 months (since January 2013 to June 2015).

This document has been elaborated by the Innovation Unit of the Barbastro Healthcare Area at SALUD (Servicio Aragonés de SALUD) with the inputs from the e-RESATER project partners and the contributions of the members of the e-RESATER experts committee. These contributions from the experts committee members are highlighted in blue in the document.

The e-RESATER consortium would like to thank the experts committee their participation in the project initiatives, their interest in the activities performed and their contribution to the good performance of the project.

2.- e-RESATER project

The main goal of e-RESATER is the development of innovation networks about e-Health and e-Inclusion. These innovation networks must be competent, sustainable and interoperable at human and technical level at the rural and isolated SUDOE areas

e-RESATER is the natural evolution of the SUDOE RESATER project (RESATER stands for Healthcare and Telemedicine Networks for Rural Areas). Between 2009 and 2012 RESATER developed local networks with healthcare actors in 6 SUDOE areas. These actors shared their experiences about e-Health within a transnational and exclusive platform. This platform included exchange tools, a health observatory in the rural area SUDOE, a methodology in order to create a project for local healthcare networks at a regional level and tools for evaluating healthcare projects.

RESATER success made legitimate the decision of working at the local areas the bottom-up for innovation projects. But RESATER also demonstrated that there are still some barriers to be removed in order to grant continuity for the assistance, with the support of an open and continuous innovation system, sustainable at the isolated rural territories SUDOE. In spite of the fact that needs are widely identified: actors must work together and ICTs access must be granted in these areas, the local technological services that really meet these needs are not widely developed. For these reasons, companies at the SUDOE areas must get help in order to develop their products, to adapt these products to the needs and to make them sustainable within the context of innovative networks competent and inter-operative at a technical and at a human level. By meeting this goal, competitiveness in one of the economic areas within the SUDOE regions will be improved.

The VITLAB space is the core of the e-RESATER project. A set of new services are accessible now to the health and social care stakeholders thanks to this new platform (http://vitlab.resater.eu).

A set of local applications related to telemedicine and health and social care integration have been piloted at different regions of the SUDOE space. The Aragón region has piloted a service of telemonitoring of vital signs at retirement homes; the Pays Couserans region has tested two services related with telemonitoring: one at the Home Hospitalization service and another one at nursing homes. It has also worked in the definition of a shared Health and Social record. The Gers department has developed a Personal User Record combining both social and health care and the Spanish region of Asturias has developed a new functionality with allows the promotion of healthy habits through the collaboration of the healthcare and the social care sectors. The lessons learnt from these experiences have been shared among the project partners and are being published through the VITLAB.

An open innovation process was designed and carried out by Aragón and Pays Couserans within the context of the e-RESATER project. The final aim of this process would be to establish a collaboration framework that could lead to the co-development of applications and services in a multi-stakeholder environment able to narrow the gap between the supply side and the demand position.

2.1.- The e-RESATER Consortium

Picture 1. Regions involved in e-RESATER

This picture and the next table include the partners that make up the e-RESATER consortium. Besides these partners, some associated partners and many external organizations and companies have participated at the project initiatives.

Partner	Region / Country	Logo
Syndicat Mixte du Pays Couserans	Midi Pyrénées Francia	
Federación Asturiana de Concejos	Asturias España	
Fundación INTRAS	Castilla León España	
Fundación para el Desarrollo Social	Aragón España	
ADRAVE	Val do Ave Portugal	
UDCCAS Gers	Midi Pyrénées Francia	
Servicio Aragonés de Salud	Aragón España	

Table 1. e-RESATER partners

2.2.- Work Packages and Workplan

The workpackages in which e-RESATER work has been divided are:

- **WP0: Preparation.** Partner meetings, preparation of the project proposal.
- **WP1: Coordination.** Consortium meetings, administrative and financial follow-up, coordination, partnership coordination
- **WP2: Towards a Virtual Lab.** Development of new services in the platform towards a new tool for the development of innovation processes in e-Health and e-Inclusion. The main goal of this WP has been the development and maintenance of the VITLAB (http://vitlab.resater.eu)
- **WP3: Co-development of innovative services** and products about e-Health and e-Inclusion in the SUDOE territory. This WP has included also the Open Innovation Process designed for the project.
- **WP4. Knowledge network** in e-Health and e-Inclusion in the SUDOE territory.
- **WP5. Follow-up and evaluation.** Technical monitoring, follow-up of indicators, experts committee.
- **WP6. Advertising, information and capitalization:** dissemination, transferability and sustainability in the long term.

2.3.- e-RESATER evaluation

The evaluation of the e-RESATER project is composed by three main components:

- **The general project evaluation.** This generic evaluation was included in the project proposal and includes the collective indicators: realization, result and impact of the overall project. It includes all the work packages and not only the local applications one (WP3). This evaluation has been made through the update and follow-up of a set of indicators grouped into three sections.
- **The local applications assessment** (the tangible experiences developed in the context of the WP3). This evaluation has been made under the GEMSA framework. GEMSA, Autonomous Multidimensional Health Evaluation Grid, (Le Goff-Pronost M; Picard, 2011)[1] (https://recherche.telecom-bretagne.eu/gemsa) is an evaluation methodology for telemedicine projects which was already used for RESATER.
- **The evaluation of the open innovation process in e-RESATER.** In the context of the WP3, a subset of project partners decided to initiate a process of open innovation for the development and enhancement of their local applications. This was the first experience for all the partners involved. This part of the evaluation was focused on this process.

3.- e-RESATER evaluation

3.1.- Experts Committee

The experts committee of e-RESATER is composed by professionals from different areas and countries with expertise on e-health, evaluation methodologies and innovation. The members of the committee are:

- **Mrs. Myriam Le Goff-Pronost,** Phd in Economics, with expertise in the telemedicine evaluation methodology GEMSA**.**
- **Mr. Jon Mikel Zabala,** European Phd in Engineering and Innovation Projects, expertise in Open Innovation.
- **Mr. Juan Manuel Suárez Álvarez,** MD, Comptroller at the City Council of Cangas de Narcea. Expertise in Public Procurement.
- **Mr. Jean-Yves Bousigue,** MD General and Visceral Surgery and Neuro-Surgery, expert on telemedicine.
- **Mr. Pierre Rumeau,** MD, PhD in modeling, Medical Advisor to GCS TéléSanté Midi Pyrénées, expert in Telemedicine projects.
- **Mr. Pierre Benaim,** General Chief of the Innovation Strategy of Midi-Pyrenées, expert on innovation strategies
- **Mr. Olivier Rey ,** Pays Couserans Manager, e-RESATER Project Manager.

[1] LE GOFF-PRONOST M., PICARD R., 2011, "Need for ICTs assessment in health sector: a multidimensional framework", Communications and Strategies, No. 83, 3rd Q., 87-108.

– **Mr. Juan Coll Clavero,** MD in Surgery and Medicine, Innovation and New Technologies Manager, Expert on Telemonitoring and Healthcare Innovation Projects.

3.2.- Project Indicators

The indicators presented in the following paragraphs are those defined in the proposal of the e-RESATER project. These indicators have been updated during the project lifetime. During the initial phase, only numbers were stored but after some of the experts meeting, it has also been recorded the value, the explanation about the collection method and some feedback about each item.

3.2.1.- Project Fulfilment

Fulfilment Indicators	Unit	Goal	Value Reached 30/6/2015		Comments
			Value	%	
A.1.3 Entities that have collaborated at the project development	Number of entities	50	57	114 %	Including partners, experts, third parties, speakers and other participants at the project activities
A.1.4 Companies and SMEs taking part in the financial innovation partnerships (Nº)	Companies	10	25	250 %	Companies which have participated at the open innovation process (participation at the local and transnational meetings of the GT3 and at the open innovation process) and in direct contacts with the partners
A.1.1 Project about the R&D development and about innovation networks.	Projects	1	1	100 %	e-RESATER
A.2.6 New forums at the observatory of the project platform.	Forums	3	4	133 %	Four forums were created: three (finally grouped into one) related to the discussion groups included in the project seminars and workshops. Besides this, a forum about open innovation was created to give support to the open innovation process. The online activity was not as intense as expected. This was balanced out with the participation at the seminars and workshops which was highly above the initial forecast.
A.2.7 Workshops of the e-RESATER knowledge network.	Workshops	2	4	200 %	Oviedo, Zamora, Barbastro, Toulouse
A.2.2 Transnational Steering Committees organized at e-RESATER	Committees	6	7	116 %	Vilanova de Famaliçao, Oviedo, Madrid, Zamora, Barbastro, San Sebastián, Toulouse
A.2.8 On-line applications involving an approach between healthcare and social care professionals	Applications	2	5	250 %	Vitlab, Forums on Vitlab. Applications from SALUD, ECHOSANTÉ and FACC.
A.2.1 Transnational Seminars organized at e-RESATER	Seminaries	4	6	150 %	Two Seminars in Portugal and 4 GT3 seminars in Barbastro and Saint Lizier
A.2.5 Evaluation documents (experts) created at e-RESATER	Documents	30	32	106 %	Update on project indicators, Open Innovation Process Documents, Final Document, …
A.2.4 Communication Supports created for e-RESATER	Supports	10	11	100 %	Material (posters, videos, newsletters, press compendium, web sites) created for the seminars, workshops and vitlab.
A.2.3 Entities at the e-RESATER distribution list.	Organizations	150	285	190 %	Entities belonging to the partners distribution lists, workshop attendants.

Table 2: Indicators: fulfillment

Picture 2: Participants at the e-RESATER network workshop at Barbastro

3.2.2.- Project Results

Result indicators	Unit	Goal	Value Reached 30/6/2015		Comments
			Value	%	
B.1.4 Tools (applications and services for the technological transfer between technological centers and companies and SMEs) set up in the SUDOE regions and countries (Nº)	N°	3	6	200 %	- Telemonitoring application (Aragón) - HAD, EHPAD application (Pays Couserans) - DMSP. Dossier Medico Social Partagé (PC) - VITLAB - Technological solution for socio-medical coordination approach in a web environment and mobile devices (Asturias)
B.1.5 Companies and SMEs which have enjoyed the successful projects results (Nº)	N°	500	248	49 %	Approach to the number of companies who have participated at the project activities.
B.1.3 Cooperation transnational network created. (Nº)	N°	1	1	100 %	The cooperation network between partners has been developed. There is a new agreement with a European project (Mastermind ICT-PSP GA 621000) for the interchange of knowledge and the dissemination of the information.
B.2.3 Professionals/users who have participated at a project activity (men)	N°	70	76	108 %	Number of members of the committees and professionals who have participated at any of the project activities
B.2.2 Participants at the forums (women)	N°	35	152	434 %	This is the number of women participating at the workshops
B.2.8 Users of the platform services (women)	N°	15	38	253%	Number of women registered at the platform
B.2.5 Professionals / users who have received the communication support (men)	N°	2.000	800	40 %	Men in the distribution list and who have participated at the workshops
B.2.7 Users of the platform services (men)	N°	35	69	197 %	Number of men registered at the platform
B.2.9 Number of connections to the platform	N°	10.000	61225	612 %	Total number of visits to the platform and to the SALUD e-RESATER website
B.2.1 Participants at the forums (men)	N°	65,00	130	200 %	This is the number of men participating at the workshops (not including Toulouse)
B.2.6 Professionals / users who have received the communication support (women)	N°	1.000	400	40 %	Women in the distribution list and who have participated at the workshops
B.2.4 Professionals/users who have participated at a project activity (women)	N°	30,00	87	290%	Number of members of the committees and professionals who have participated at any of the project activities

Table 3: Indicators: results

3.2.3.- Project Impact

Impact Indicators	Unit	Goal Value	Value Reached 30/06/2015		Comments
			Value	%	
C.1.4.2 Working positions created (women)	N°	2	3	150 %	Echo-Santé and INTRAS (2)
C.1.2 Lasting cooperation networks settled (Nº)	N°	1	1	100 %	e-RESATER
C.1.4.1 Working positions created (men)	N°	2	1	50 %	SALUD (Total goal number between women and men achieved by adding C.1.4.2.)
C.2.2 New methodologies of innovation markets methodologies	N°	3	3	100 %	Couserans and SALUD have worked in the open innovation process for a telemonitoring platform. INTRAS has developed an innovative negotiation methodology in the VITLAB framework FACC has worked with local associations, institutions and private companies to set up its local application.
C.2.3 Professionals (health and social) potential beneficiaries of the e-RESATER local applications.	N°	250	300	120 %	Healthcare and social care professionals at the nursing homes, establishments and healthcare centers where the local applications have been piloted.
C.2.1 Patients who have enjoyed the e-RESATER local applications	N°	1.500	8200	546,67 %	Total number = 200 people in the SALUD and Couserans applications and 8000 approximately in Asturias

Table 4: Indicators: impact

3.2.4.- Comments on project indicators

[Experts INPUT] These are monitoring indicators of a project, at a global level. They permit the description of the project itself and of its impact.

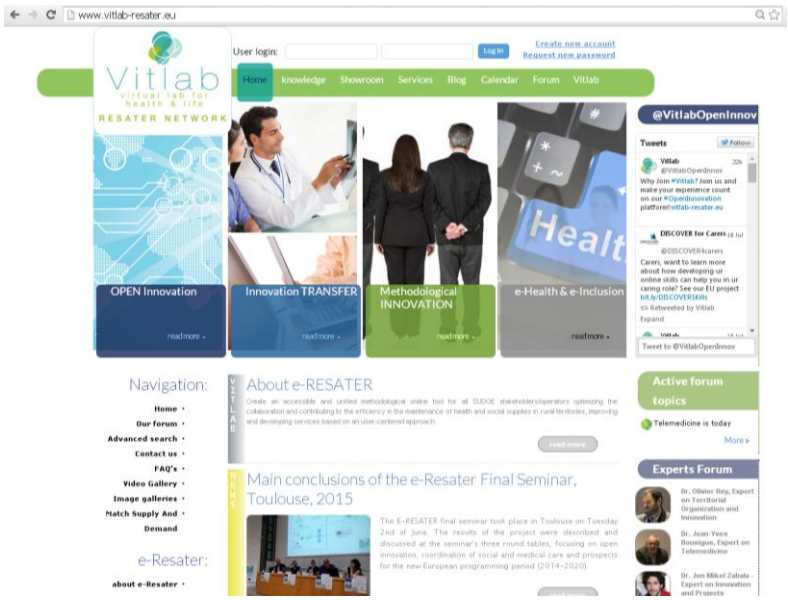
This panel of classic indicators - goals, results, impact - gives a global picture of the whole project. In spite of this, this analysis can't go further than the junction of the indicators, without taking into account the strengths – many – and the weaknesses, especially in terms of the impact, which are a clear indicator of the actual maturity state of the telemedicine.

3.2.4.1.- Main outcomes

Besides the "quantitative" data from the indicators, the main tangible results from e-RESATER are those which have arisen from the activities performed at the different work packages that made up the project, especially under the "technical" work packages:

- **GT2: VITLAB:** The GT2 work package has been focused in the **development and maintenance of the VITLAB** (http://vitlab.resater.eu). The VITLAB is an information web portal, an open innovation tool around e-health and e-social services and a living lab. It concentrates the activities, the knowledge, the initiatives, the tools and the stakeholders in an innovation environment. The

number of visits and accesses to this tool and its inclusion in the ENOLL (European Network of Living Labs) are the most tangible results of the work performed.



Picture 3: e-RESATER Vitlab (http://vitlab.resater.eu)

- **GT3: LOCAL APPLICATIONS.** This work package was based on the local e-health applications to be studied, adapted or developed, set up and evaluated at different rural areas and the dissemination of the knowledge gathered during these experiences. The applications included in this work package are:
    - Telemonitoring service in elderly Homes (Aragón, by SALUD and FDS)
    - Asturias Actua en SALUD – Health Observatory (Asturias, by FACC)
    - Elderly Homes monitoring tool (Pays Couserans, by Echosanté)
    - Home Hospitalization monitoring tool (Pays Couserans, by Echosanté)
    - Shared Health and Social Electronic Record (Pays Couserans, by Echosanté)
    - Social Record (Gers, by UDCCASS)
    - VITLAB (Zamora, by INTRAS)

  Besides the applications, an open innovation procedure was defined and initiated and a deep collaboration environment has been setup and enhanced between the Pays Couserans area (from MidiPyrenees) and the Barbastro Healthcare Area (from SALUD-Aragón).

- **GT4. KNOWLEDGE NETWORK.** A network of collaboration has been set up with hundreds of participants at several events. The seminars and workshops during the project have given the attendants the opportunity to improve the knowledge, to enhance their experiences and to do networking. Three main lines of work have been transversal through the whole project: models, tools and evaluation in the fields of integrated (social, health and also mental) care and open innovation in rural areas.

3.2.4.2.- Determining factors (easing and impeding)

It is difficult to draw up a set of conclusions that might apply to e-RESATER as the project has included a very wide set of assorted activities and initiatives. The ideas that have supported these actions are open innovation, integrated (health, social and mental) care, knowledge networks, e-health and rural areas, among others.

3.2.4.2.1.- Easing factors

Rural and remote areas usually belong to small and controlled environments which are the most suitable locations to design, to setup and to assess innovation initiatives. Thanks to their restrained characteristics and to the evaluation processes can be more acute and the analysis of the results can lead to a better eventual scaling up of the pilot experiences.

The **involvement** of all the **stakeholders from the beginning** is an enabler for innovation. Training procedures, information campaigns and the participation of all the agents in all the stages of the innovation processes contribute to more successful results.

Participation of members from distinct areas, developing tasks at different levels of specialization and belonging to organizations from the public and also from the private sectors enrich the innovation procedures and help in narrowing the gap between the supply and the demand side.

3.2.4.2.2.- Impeding factors

The idea that the technology is the solution is usually a mistake, as **technology** should be considered as an enabler and **not as an end in itself**. For instance, the creation of the forums in the VITLAB did not achieve the expected results as it was not the real need and was not underpinned by a real framework of cooperation.

The **professional egos** must be dealt with care, as it is very difficult to handle the innovation processes and the changes without interfering in the personal fears of loss of competences. All the profiles involved must identify an added value resulting from the new processes for each of them.

3.2.4.3.- Assessment of indicator values

[Experts INPUT] The assessment approach is « classic » and it is neither difficult to understand nor to analyze. Nevertheless it is not fully adapted to the understanding of the dynamics of fulfillment and impact.

Most of indicators are usage indicators; it is quite important information for the monitoring of a project. For an innovative project, the results of such indicators can

explain a major part of the success (acceptability from the professionals and patients, cooperation and participation).

1. Most of the objectives of the project have been met or even surpassed, so the initial forecast could be considered as realistic.

   - The follow-up and performance of the partners has reached the expected results. This is the impression that can be obtained from an initial analysis of the result indicators, with rates over 100%.

   - There is a similar outcome in terms of internal management: steering committees, workshops – the dynamization of the whole project is clear.

2. The result indicators confirm the first impressions, as the rates are also higher or equal to 100%. It should be highlighted that if the use of the tools is not a barrier any more, the use of them is not as high as it would be expected. The high number of connections could be explained mostly by the search of information (or of training materials). The use of ICT is not fully natural and integrated yet in the daily practice, probably because the concept, at least regarding telemedicine and even the more open design, is still not part of the use/conceptual customs

There is a real consistency between the indicators and the results. It is interesting to follow over a long time period the evolution of the results; it will be the tool for strategic considerations.

The weakness of the result for the impact indicators should be downplayed and considered conjunction with the values obtained for the other indicators and with an analysis of the "youth" of the projects. The projects that are currently on going should be followed up.

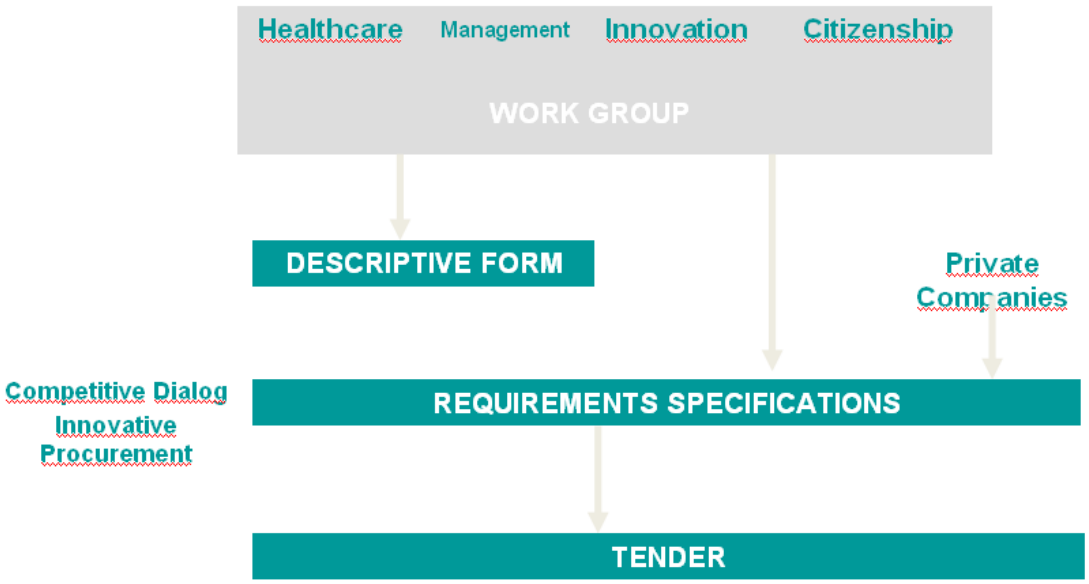
3.3.- Open Innovation Process

An ***Open Innovation Process*** was designed and initiated in the framework of the WP3 (Local Applications Development). The context of this initiative was the co-development of a vital signs telemonitoring application with a universal perspective, based on the requirements from both the Aragón and the Pays Couserans healthcare organizations.

The main reason to carry out this process was to trigger a framework of collaboration including private companies, public institutions, user associations and educational institutions. The final aim is to develop an open innovation process where all the stakeholders benefit and get some profit from the interaction.

The public provider can use the resulting tool without paying licenses that could hinder the service sustainability in the mid-term, the private company can validate the application in a real environment and can transfer this solution to other environments to

take advantage of it, the users can tailor the offer to their demands and the educational institutions can collaborate, provide advice and enhance their knowledge.



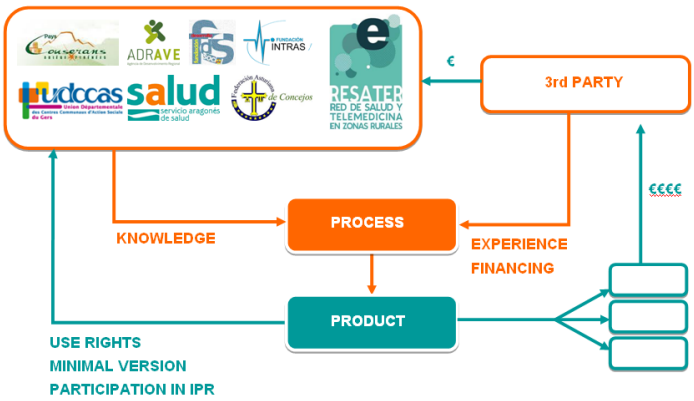
Picture 4: Open Innovation Methodology

The process designed included a first step in which a set of physical meetings took place involving private companies, user representatives, public organizations and educational institutions. The major aim of these meetings was to narrow the gap between the supplier group and the demand side in order to have a wider knowledge about the existing applications and also about the real needs.

Once this process ended, a generic descriptive form including the main characteristics of the demand side was published in order to gather inputs from other stakeholders. This publication was made through the web and also through the mailing lists distribution.

The inputs from this process were put together as a requirements specification document which is ready to be published as a final tender.

Besides the open innovation process, a model for the return of investment based on the shared Intellectual Property Rights (IPR) exploitation was designed.



Picture 5: Model for the return of investment

3.3.1.- Open Innovation Indicators

A set of indicators designed for the open innovation process and different from those of the general project were defined. These indicators were based on the goals defined for the Open Innovation Process.

Goal	Indicator	Number
1.- Approach between supply and demand	1.1.- Number of presentations of private sector solutions	9
	1.2.- Number of private companies participating in the presentation sessions	9
	1.3.- Number of presentations about the needs of the public side	100
	1.4.- Investment in public innovation procurement (PCP)	0
2.- Opening degree (participants)	2.1.- Number of prívate companies (micro-companies, SMEs, Big companies) participating	52
	2.2.- Number of academic institutions participating	15
	2.3.- Number of administrative organizations participating	3
	2.4.- Number of user associations participating	6
	2.5.- Number of countries involved	3
	2.6.- Number of different profiles involved	7
	2.7.- Number of institutes / research organisations involved	2
3.- Open Innovation Process	3.1.- Expected investment in open innovation processes	0
	3.2.- Participation in technological networks	2
	3.3.- Number of companies participating with an active role	5
	3.4.- Number of innovation plans carried out	1
	3.5.- Number of suggestions from the social agents (users and users associations)	2
4.- Process Results	4.1.- Number of financing resources obtained	0
	4.2.- % of external financing	0
	4.3.- IPR generated / Patents generated	1
	4.4.- Number of jobs created (rural media / total)	0
	4.5.- Number of agreemens signed	1
	4.6.- Number of applications designed	2
	4.7.- Number of applications developed	2
	4.8.- Number of applications checked	2
	4.9.- Number of new interactions between collaborators	2
	4.10.- Documents about return of investment generated	2
	4.11.- Number of sources of return of investment generated	0

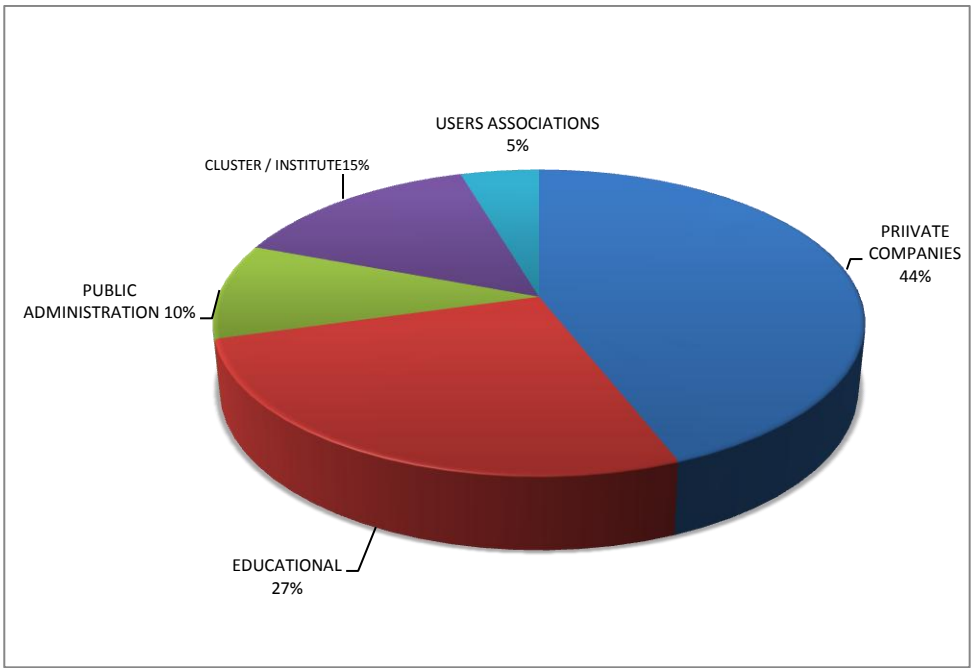
Table 5: Open Innovation Indicators

As it was the first experience in this field, there was no goal for these indicators and only the raw values are provided.

3.3.2.- Open Innovation Results

The analysis of the indicators shows that only some of the goals were reached:

- The approach between the supply and the demand. A large set of interactions were produced in this context, with all the stakeholders participating.



Picture 6: Participation at the Open Innovation Process

- The call was sent to 109 contacts (from the SALUD site) and 28 contacts (from the Pays Couserans site). The distribution of the recipients of this document is shown in the chart above.

- 66 entities visited the web site specifically designed for this purpose. 7 inputs were received: one input from one user, two descriptive forms filled-in and four requests for contact with the entities. The figures are not very impressive but they can be considered as a success as the procedure was new and no economic incentive was offered in it. Moreover, thanks to this initiative some local companies contacted the partners and collaborations have arisen since then.

[Experts Input] The open characteristic of the innovation has worked, but it is difficult to go further as there is not much feedback from other participants. Moreover, it seems that there is not actually a structured model that could evaluate this kind of initiative.

As in this project the main marker of the success of the process was the resulting working prototype of service: this is most understandable regarding the level of funding, the duration and foremost the novelty of the process and therefore the need for a sound obvious endpoint. It would be interesting for the European Citizen if further action could be taken to:

1. Assess if the prototypes could endure/end up as operational economically sound services.
2. If those who took part in the Vitlab forums without actually, eventually, taking part in the final prototype had a benefit or would expect a benefit from their participation.
3. Set a legal follow up for possible "side effects" mostly regarding intellectual property issues.

Open innovation is looking into the action of all stakeholders. Within e-Resater, dynamic is initiated, each stakeholder has to find its motivation to move towards an open innovation network of knowledge sharing, know-how and interactions. E-Resater is at the beginning of co-creation and allows testing a new framework of telemedicine driving, based on resources pooling and local initiatives support. It is based on an operating multi-actor design process as oppose to co-design where intellectual property aspects and expected revenue as a secondary factor and participants regarded as individuals rather than representative of the various stakeholders.

3.4.- Local Applications

The local applications that have been included in the experimentations of the GT3 (Local Applications) in e-RESATER and their promoters at local level are:

- Telemonitoring service in elderly Homes (Aragón, by SALUD and FDS)
- Elderly Homes monitoring tool (Pays Couserans, by Echosanté)
- Home Hospitalization monitoring tool (Pays Couserans, by Echosanté)
- VITLAB (Zamora, by INTRAS)
- Asturias Actua en SALUD – Health Observatory (Asturias, by FACC)
- Shared Health and Social Electronic Record (Pays Couserans, by Echosanté)
- Social Record (Gers, by UDCCASS)

The GEMSA methodology has been used to evaluate the local applications in this workpackage.

The Social Record from UDCCASS and the Shared Health and Social Electronic Record from Pays Couserans haven't been fully included in the GEMSA evaluation as their activity was more focused on the initial phases of development (analysis and design) rather than on the experimentation phase.

3.4.1.- GEMSA Methodology

GEMSA is a methodology used for the assessment of telemedicine projects. It includes three main steps:

- The fulfillment of a **descriptive form** with the main characteristics of the application which major aim is to describe it carefully and to give a detailed idea about the goal, the methodology and the resources.

- The fulfillment of **an evaluation framework** organized around five axes (strategy, technology, economy, organization and Quality and Use), with questions for each axe. This grid includes a set of questions in order to analyze the application around these axes, with indicators for each field.

- The **evaluation from an experts group** who analyses the results and assesses the outcomes.

GEMSA grid /framework was shared by all the local initiatives. GEMSA is a quite consequent list of questioning, but a common work permits a process of convergence towards a limited list of indicators. The selected axes are presented in the following table.

Strategy axis	Technology axis	Organisation axis	Quality and uses axis	Economic axis
Sub-axis 1: Identification of health, public health or solidarity issues-	**Sub-axis 1:** Scientific or technologic innovation	**Sub-axis 1:** Repartition and mobilisation of knowledge	**Sub-axis 1:** Contribution to the patient and its relatives	**Sub-axis 1:** Identification of system costs
Sub-axis 2 : program rationale	**Sub-axis 2:** Innovation mastery	**Sub-axis 2:** Modalities of exchange in the care process	**Sub-axis 2:** Contribution to the professionals	**Sub-axis 2:** Savings allowed by the system
Sub-axis 3: Impact on stakeholders practice		**Sub-axis 3:** Resolutions of operational conflicts, professional coordination	**Sub-axis 3:** Ethics of the solution	**Sub-axis 3:** intensity of use

Table 6: GEMSA axis and sub-axis distribution

3.4.2.- GEMSA:Telemonitoring at Elderly Homes Aragón

The service tested in the framework of the e-RESATER project in Aragón is the **"Telemonitoring of Vital Signs of elders living at elderly homes".**

One existing application for telemonitoring of vital signs oriented to users who live at home has been adapted to the elders' homes environment, and it has been tested at three elderly homes from the eastern part of the Huesca province, in the North of Aragón (Spain)

The pilot has consisted of the telemonitoring of vital signs of 125 people living at three elderly homes from the Barbastro Healthcare Sector. General Practitioners from the Public Healthcare provider, healthcare professionals and social carers from the elders' home have participated in this project in which it has been evaluated the transfer of roles and of activity thanks to ICT.

3.4.2.1.- General description of the application

The main goals of this experience were:

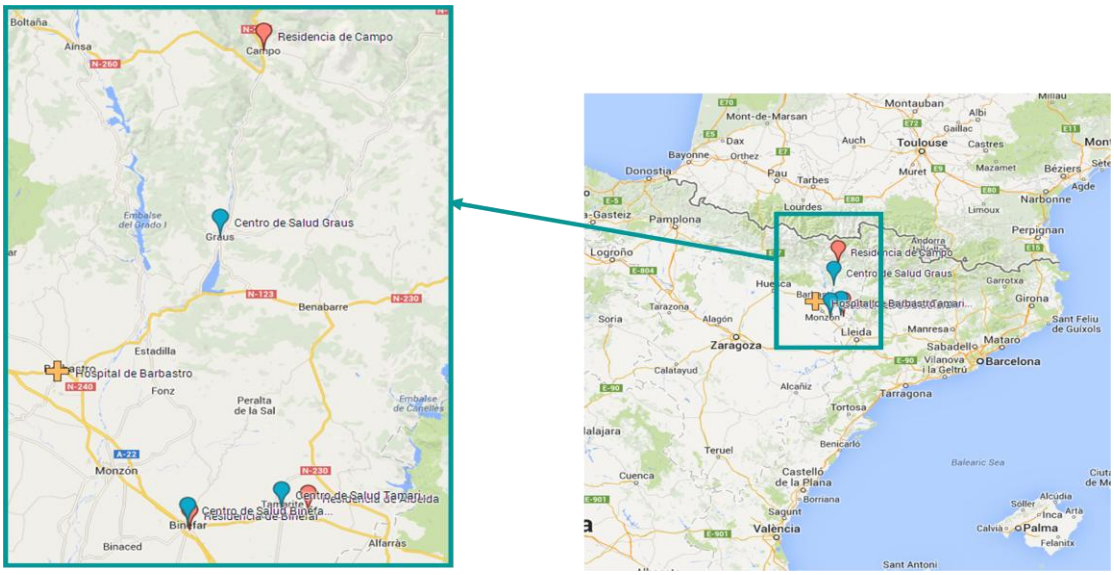
- to assess the service of the **tele-monitoring of vital signs of citizens living at elderly homes**

- to set up a service oriented to increase the **sustainability of the public institutions** with the help of ICT by transferring some activity from the public institutions to the private sector and from the healthcare professionals to the social care staff.

- to **evaluate this new model** under a methodology oriented to the assessment of telemedicine project based on five axes: strategy, technology, organization, quality, economy and project management.

The setting in which this part of the project has been developed is the Barbastro Healthcare Sector, located in the middle-east part of the Huesca province, with a population of 110000 inhabitants living in an area of 7500 km^2. It is a vast area, with a small density of population and with an ageing rate of 28%, higher than at other areas of Aragón and of Spain.

The stakeholders participating in this initiative are the Barbastro Healthcare Area, as the public provider (primary care and specialized) from the SALUD (Aragonais Regional Healthcare Service) and the management of the Elderly Homes. The elderly homes where the trial has been performed are: Valle de Ésera (Campo), Comarcal de Binéfar (Binéfar) and La Sabina (Albelda).



Picture 7: Location of the Eldery Homes and Healthcare Centres at the Aragón pilot

		
Comarcal (Binéfar)	Valle de Ésera (Campo)	La Sabina (Albelda)

Picture 8: Pictures of the Elderly Homes participating at the Aragón Pilot

All the people living in these establishments were eligible to participate in the pilot, so the **inclusion criteria** were only dwelling in one of these institutions.

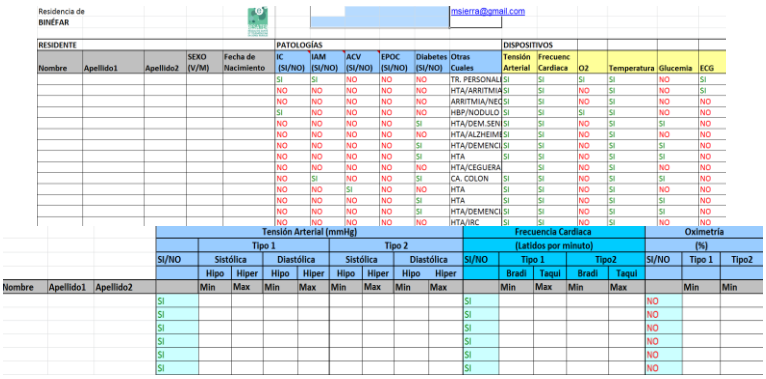
The **exclusion criteria** for participants was to have an attitude against technology, or the opinion of the healthcare professionals who might consider that this service would not add quality to the user attention (patients in palliative care, patients with dementia or patients without any of the pathologies under study).

The monitoring schedule, the measurements to be taken and instructions were decided by the General Practitioner. The vital signs to be captured were based on the clinical record of the patient (and on the existence of at least one of these pathologies: COPD, CVA, Myocardial infarction, diabetes mellitus, history of stroke). With this profile, a set of measurements were chosen: blood pressure, oxymetry – SpO2, heart rate, temperature, glycemia, ECG.

	Blood Pressure	Heart Rate	ECG	Sp02	Glycemia	Temperature
Heart Failure	X	X		X		X
Myocardial Infartion	X	X	X			X
Cerebro Vascular Accident	X	X				X
Chronic Obstructive Pulmonary Disease (COPD)	X	X		X		X
Diabetes (DM)	X	X			X	X

Table 7: Relationship between pathologies and measurements at the Aragón pilot

A set of pathologies and of threshold values for each measurement were set by the GP for each patient. There was also a set of generic values that might apply to most of the participants.



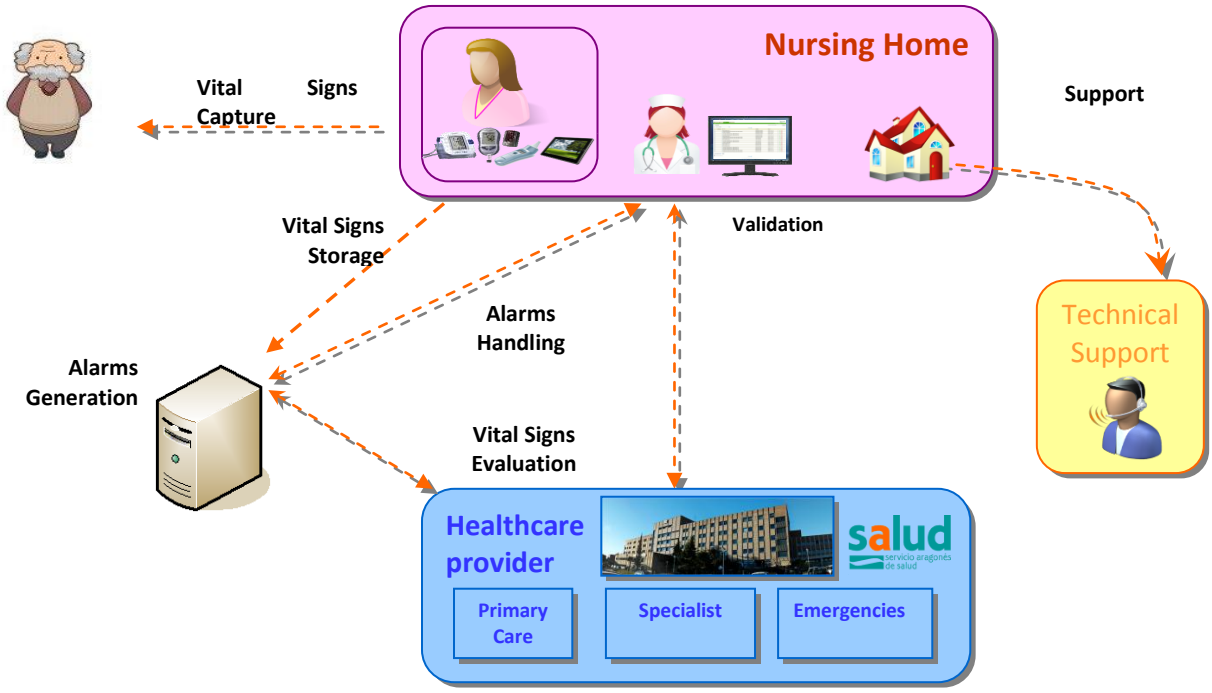
Picture 9: Tables with pathologies, devices and threshold values for each measurement

Once the schedule and the instructions are decided by the GP, the non healthcare staff from the elderly homes is in charge of taking the vital signs of the residents with a technological kit. The data gathered is sent automatically to the SALUD Information Systems and is stored in the appropriate databases. If these values are out of the normal range pre-set for each patient, an alarm is triggered. The alarms can be: type 1 (light deviation, when it occurs, an email is sent) or type 2 (strong deviation, an SMS is sent).

	Deviation	Notification	Attention Required
Alarms Type I	Mild	E-mail	Non immediate
Alarms Type II	Acute	SMS	Immediate

Table 8: Alarms and alarm handling in the Aragón pilot

These alarms are handled by the healthcare staff from the nursing home and the information gathered is accessible by them and also by the Primary Care Teams. The values that caused alarms of type 2 and at least one measurement per month are stored at the SALUD Information Systems (OMI-AP. Primary Care EHR).



Picture 10: Methodology at the Aragón pilot

The healthcare staff from the nursing home acts as the "Contact Centre" of the pilot. Its mission is to handle whatever extra situation arises from the vital signs capture. When an alarm occurs it is sent by email (type 1- light) or by SMS (type 2 – severe) to the healthcare staff of the elderly home. They validate the alarm (check if it is a real value out of range and not a false positive) and take action if needed.

The personnel from the Primary Care teams has access to the telemonitoring data and is in contact with the members of the "Contact Centre" of the elderly home to interchange whatever information they might consider relevant.

Each elderly home has a telemonitoring kit made up of a tablet PC, a tensiometer, a pulsioxymeter, a glucometer, an ECG and a tympanic thermometer. The capture of the vital signs is sent through Bluetooth to the tablet PC. The tablet PC sends the data automatically through WiFi to the telemonitoring portal.

The general characteristics of each individual experimentation at local level can be checked in the following table.

	Binéfar	Campo	Albelda
Initial date	29/04/2014	01/04/2014	20/05/2014
End date	30/10/2014	28/02/2015	07/04/2015
Length of the trial	6 months	10 months	10 months
Frequency of the vital signs capture	Monthly	Monthly	Weekly
Values used for the alarms thresholds	Generic	Generic	Specific for each patient
Number of users included	50 (17+9 out))	27	41 (2 out)
Number of women	20	12	29
Number of men	30	15	12
Average age	85,22	84,88	86,19
Average age women	87,35	87,25	87
Average age men	83,8	82,85	84,25

Table 9: General characteristics of the local experimentations at the Aragón pilot

The GPs in charge of two nursing homes (Campo and Albelda) choose the monthly schedule for the vital signs capture and the GP at "La Sabina" from Albelda preferred the weekly basis, which is the frequency that had been established in previous experiences (DREAMING[1] and PITES[2]).

Each nursing home has a different organizational and funding model:

- The Binéfar nursing home is public and its funding depends on the comarca (intermediate organizational structure between the province and the municipality) authorities.

- The Campo elderly home has a mixed model (public funding from the local authorities and a private management).

- The Albelda elderly home has a fully private model.

The following table shows the healthcare personnel both from the SALUD and from the elderly homes that has been involved in the development of the pilot.

Location	Binéfar	Campo	Albelda
Institution (Elderly Home)	Comarcal de Binéfar	Valle de Ésera	La Sabina
Healthcare staff	Victoria Delgado María José Palacio	M.A. Trigo	Mayca Blanc Esther Blanc
Primary Care Team	Dra. MªD. Muñoz	(Dra. Mª T. Feo) Dra. María José Nicolás	(Dr. JM Leris) Dra. M. Pascual
			

Table 10: Participants at the Aragón pilot

3.4.2.2.- GEMSA Descriptive Form (summary)

The complete version of this form can be checked on annex 5.1.

Name of the application: Telemonitoring Service at Elderly Homes
Promoters of the project: SALUD (Barbastro Healthcare Sector) and FDS

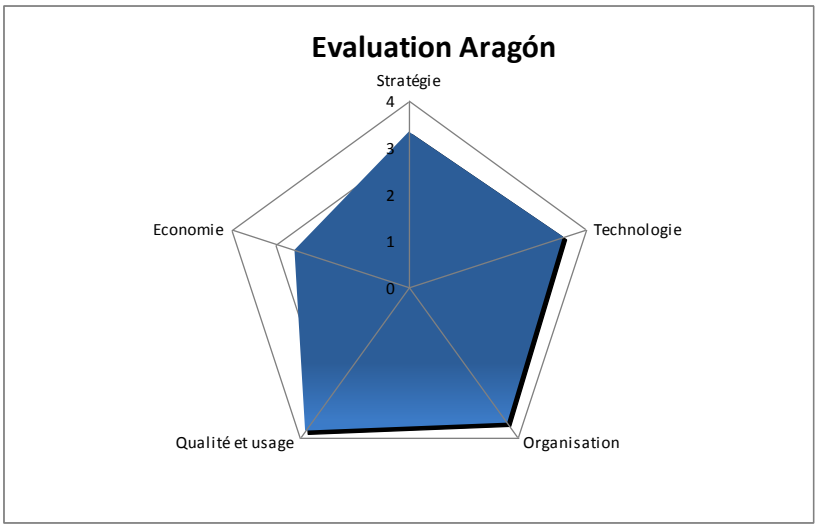
Public needs treated:

- Chronic patients telemonitoring
- To bring closer healthcare to elderly homes
- To bring closer healthcare to rural areas

Added value:

- Transfer of competences from the healthcare sector to the third sectors (vital signs measurement)
- Storage and automatic processing of the schedule and the measurements of vital signs.

3.4.2.3.- GEMSA Evaluation Chart



Picture 11: GEMSA Evaluation Chart Aragón

The results from the GEMSA evaluation grid show a high performance in the five axes examined, especially in the Quality and Use and Organization ones. The technology and strategy components have lower values and the economic part is the one with the smaller rate.

- The **quality and use impact indicator** has a high value that is based on the satisfaction of the participants - especially of the end users involved - with the service provided. The user satisfaction was measured through the assessment of the questions in the forms that can be found on the Annex II of this document.

- The **organizational impact** is high as the solution contributes to the transfer of tasks between professionals. Thanks to the questionnaires of satisfaction that the professionals have filled in it has also been demonstrated that the solution is adequate and that implies a change in the roles of the staff involved.

- The **technological innovation** has a medium score at the evaluation grid. The technology used for the project (monitoring devices, tablet PCs, alarms handling and servers) had already been set up and evaluated in previous projects. The real innovation in this experience is the integration of these tools in external organizations (elderly homes) and the impact of this integration both at these entities and at the healthcare provider.

- The **strategy evaluation** depicts a medium impact of the project contribution to solve a problem of public policy in the social and healthcare fields. Despite the fact that the treatment of chronic patients is a topic of high importance in the management of the healthcare organizations, the elderly homes represent only a subset of the whole picture. The approach chosen is not a scientific trial but the evaluation of the impact of a change in the delivery of a service at a specific

context. Previous projects (as DREAMING[1] and PITES[2]) evaluated (and others are still assessing) the impact of the use of technology in other environments and this experience is a complementary and new approach to them.

- The **economic indicator** has the lowest value within the Aragón grid. This is due to the fact that the GEMSA approach is more oriented to the generation of new services and economic activity and the analysis under the perspective of a public healthcare provider is mainly focused to the sustainability of the welfare governmental organizations.

The values, sources and the basis for this analysis can be found in the following section. A more complete evaluation in the economic field has been performed in order to scrutinize the data gathered to do the economic analysis.

3.4.2.4.- Evaluation

The generic evaluation about the service "Vital Signs Telemonitoring" at the Elderly Homes in Aragón has been made under four perspectives: economic, quality of life, clinical activity and users satisfaction. Several data have been gathered in order to perform this analysis.

3.4.2.4.1.- Economic

A deep analysis about the costs of the new service and about the differences between the new approach and the old one has been produced. This analysis is based on the Albelda elderly home in which the data acquisition, the methodology and the length of the experience can give a broader perspective about the impact.

The following table shows what are the total costs estimated for a group of 41 users in the Albelda elderly home for a period of 10 months.

The "PRE Group" column includes the costs related to the previous existing service (the vital signs capture traditionally performed by the nurses at the elderly homes) and the "e-RESATER" column shows the costs related to the service evaluated in e-RESATER.

The **equipment and operative costs** are those related to the acquisition of the devices involved, the software licenses and infrastructure necessary to set up the service, and other costs related to the material needed. Two remarks can be added to this table:

- The equipment costs in e-RESATER have been fully included, without taking into account the amortization costs (the total amount could be paid off in a period of 5 years)

- The equipment costs in the PRE column have not been included as they have been considered as insignificant to the whole amount.

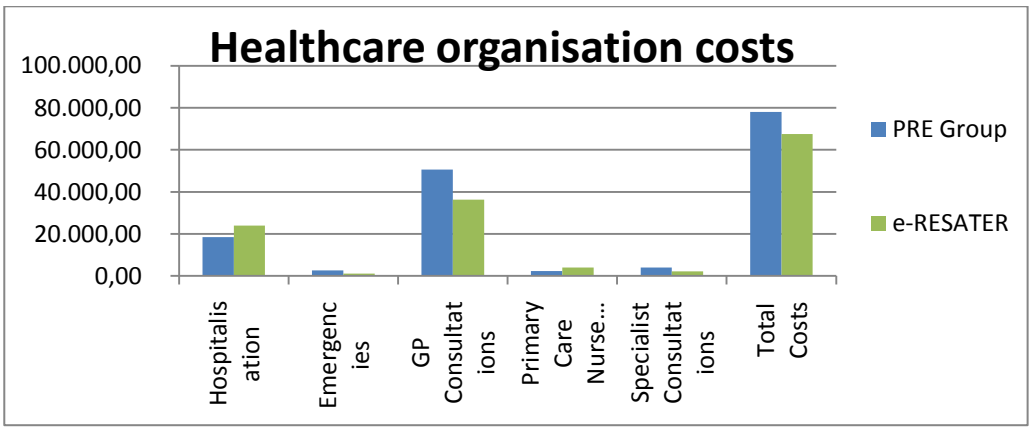
Vital Signs Monitoring Costs		
	PRE	e-RESATER
Equipment costs		**7.035,70**
1 Tablet PC + 1 Kit Telemonitoring Devices		1485,7
SW Tablet PC		550
Call Center + Server		5.000,00
Operative costs		**1.186,80**
Glucose Strips		172,8
Software Licenses for Call Centre		1000
SMS		14
Staff at the Elderly Homes	**610,40**	**1.719,75**
Time invested by non healthcare staff		1.719,75
Time invested by nurses	610,40	585,99
Total Costs of the Service		**9.942,25**

Healthcare Costs	PRE	e-RESATER
Hospitalisation	18.495,00	23.975,00
Emergencies	2.584,00	1.088,00
GP Consultations	50.551,29	36.346,32
Primary Care Nurse Consultations	2.336,53	3.947,93
Specialist Consultations	4.020,00	2.144,00
Total Healthcare Costs	**77.986,82**	**67.501,25**

Table 11: Comparison of costs between the traditional service and e-RESATER

The **staff costs** include the time invested by the personnel to capture and to evaluate the vital signs. In the e-RESATER column the "Time invested by non healthcare staff" is the time related to the vital signs capture and the "Time invested by healthcare staff" is the time used to validate the alarm values and to examine the results of the measurements.

The **healthcare costs** rows include the expenditure related to the consumption of services at the healthcare organization related to the users included in the program during the e-RESATER period and in the PRE column those related to the same people at the same period one year in advance (without the e-RESATER service). This information can be visually seen in the following bar chart.



Picture 12: Healthcare organization expenses related to the patients in Albelda

The next table is a summary of the total costs including the service costs and the healthcare costs, the total amount and the amount per patient (total amount divided by the number of patients).

Total costs	**PRE**	**e-RES Group**
Service costs (Elderly home)		9.928,25 €
Healthcare costs	77.986,82 €	67.501,25 €
Total Costs	**77.986,82 €**	**77.429,50 €**
Cost per patient	**PRE**	**e-RES Group**
Service costs		198,56 €
Healthcare costs	1.559,74 €	1.350,03 €
Total Costs per patient	**1.559,74 €**	**1.548,59 €**

Table 12: Global and per patient total costs

The total expenditure is similar (or even smaller with e-RESATER if we take into account the amortization costs), but there is a transfer on the outlay from the healthcare organization to the private entity (in this case the private entity).

3.4.2.4.2.- Quality of life

Most of the participants in the program filled in the Yesavage questionnaire (a questionnaire for elderly people designed to measure the degree of depression) before and after the pilot. The analysis of the data gathered from these questionnaires did not allow drawing any conclusion. The seasonality, the lack of a direct intervention on the patient and the evolution of the time could vary the results and the conclusions from this analysis.

Nevertheless other results indicate that the new model results on a higher quality of life related with less suffering on the patient side:

- **Early detection.** Two atrial fibrillations, two hypoglycaemias, two hyperglycaemias and several blood pressure disorders were detected and considered as in the Albelda elderly home during the pilot.

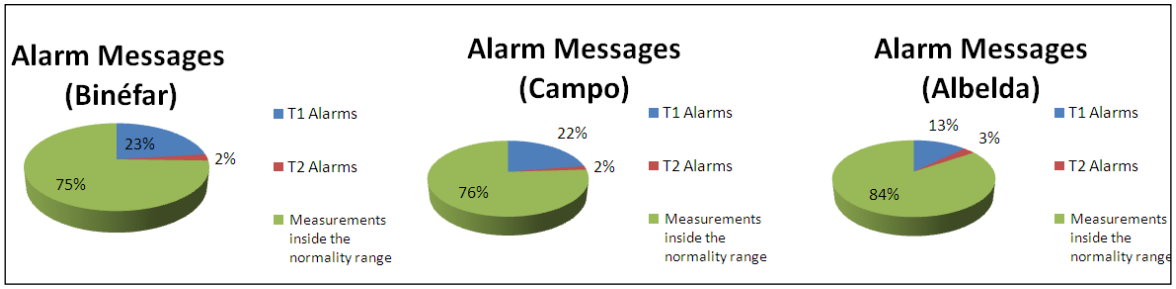
- **Impact on prevention.** The treatments for diabetic and users having high blood pressure were better adjusted thanks to the data gathered in e-RESATER, as some of them had decompensations which had not been detected before.

- **Less access to emergencies** in the e-RESATER group that could be seen as a direct indicator of a better quality of life.

3.4.2.4.3.- Clinical Activity

The analysis made under this section is related to the clinical data gathered during the project including the vital signs capture from all the users at the elderly homes.

The following pie charts show the percentage of alarms that resulted among the total number of measurements made.

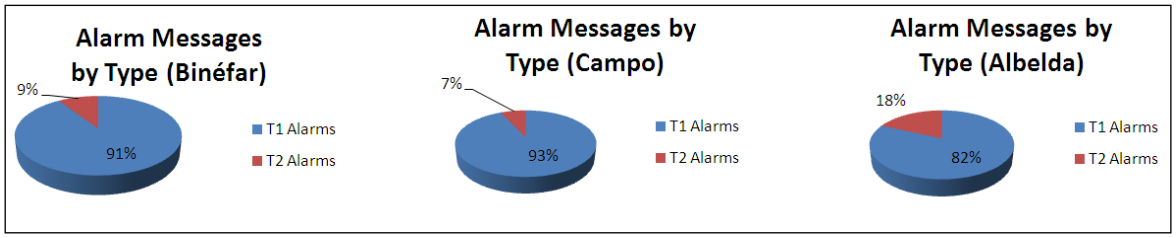


Picture 13: % of vital signs capture that generate alarms

The data gathered during the e-RESATER project is slightly different from the information at previous projects ((DREAMING[1] and PITES[2]). The number of alarms was higher in e-RESATER than in these projects. There could be many reasons for these differences, being the most reasonable: the health status of the people living at the elderly homes, which is likely to be worse than of those staying at their homes, and the difference in the validation criteria procedure for alarms at the Healthcare Institution (with more experience) and at the elders home (with less background, and less used to erase from the application false positive alarms).

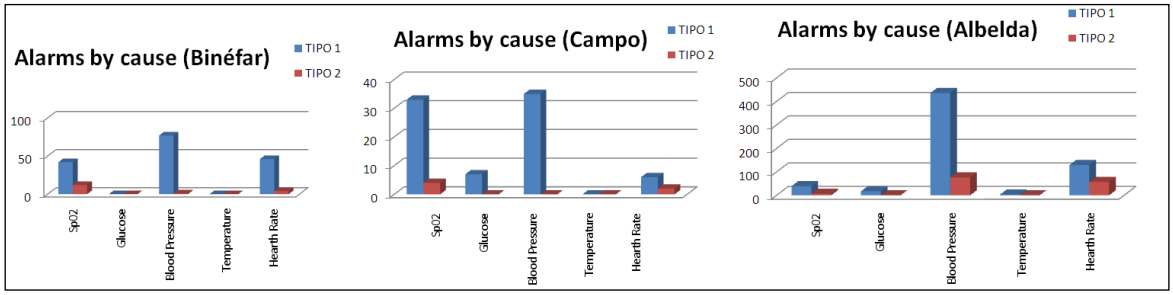
The percentage of alarms in Albelda is lower than in Binéfar or Campo. This is probably due to the fact that the GP at Albelda set the threshold alarm values specifically for each measurement to be taken to each patient.

There is also another difference to be taken into account. There is a remarkable difference between the distribution of alarms of type 1 and type 2 in the Albelda elderly home. The reason for this difference could be also the specific values set for each patient.



Picture 14: Distribution of alarms by type

Regarding the cause of the alarms, there are not big differences among the three sites (neither with the results from other projects). Most of the alarms are related to blood pressure, heart rate and saturation. There is a higher prevalence of blood pressure alarms in Campo. There might be two main reasons for this behavior: the capture basis was more frequent for this measurement and the town is located at a higher location which might lead to lower oxymetry values.



Picture 15: Distribution of alarms by cause

The data related to the consumption of direct healthcare services show that the number of external consultations and emergencies has decreased during the project and also the number of GP consultations. On the other hand, the number of nurse consultations has increased.

The reduced number of users and the lack of control over other factors force a conservative and wary analysis of these results. Nevertheless, it seems that the new service eases the transfer of activity from emergency to scheduled activity.

HOSPITAL ACTIVITY		
	PRE 1/6/2013 -> 31/3/2014	PROJECT 1/6/2014 -> 31/3/2015
External consultations	60	32
Admisions	0	1
Emergencies	19	8

PRIMARY CARE		
	PRE 1/6/2013 -> 31/3/2014	PROJECT 1/6/2014 -> 31/3/2015
Total Nurse Consultations	203	343
Total GP Consultations	879	632

Table 13: Comparative of healthcare services demand in Albelda

3.4.2.4.4.- User Satisfaction

All the participants in the project were invited to fill in questionnaires about user satisfaction. These questionnaires can be checked on the annex II of this document.

- The **professionals' questionnaires** included questions about the general evaluation of the service. The answers have been classified into three groups:

  - Technology
    - The technology devices and software have been easy to handle with and considered as useful. Nevertheless there are some improvements that have been suggested in order to facilitate the daily work and to reduce the time invested in the service. These suggestions have been collected in a document and some of them have already been implemented in the new versions of the platforms involved.

  - Assessment of the service
    - The big majority of the **professionals** involved manifest that this methodology leads to a better control of the chronic pathologies. The remaining group does not think that there is a significant difference with the traditional model.

    - The answers differ depending on the **type of organization**. The public elderly homes are more reluctant to the change as they claim that the existing service already provided has the same high standard as the e-RESATER one while the private entities see the new provision as an opportunity and an added value.

  - Transfer of activity
    - The **healthcare staff** (both at the healthcare organization and at the elderly home) recognizes the worth of the service and the improvement of the specialization of the task they perform. But they also perceive a risk in the transfer of activities to other sectors.

    - The **non-healthcare staff** at the elderly home values the service but they admit that it is an extra activity that implies time and that must be scheduled in their daily work.

- The **final beneficiaries** (the people living at the elderly homes) think that the service is positive for them as they feel safer and they perceive an improvement of the control of their pathologies. All the users who were asked have declared that they would accept to pay a fee to receive this kind of service.

- The **managers** of the elderly homes have a positive impression about the service. They think that it improves the interaction with the healthcare organization, despite the fact that they think that in general the new approach is more time consuming than the traditional service.

3.4.2.5.- Analysis of results

- **Set-up guidelines**

    - A prior analysis of the organisations, actors and resources involved is a precondition. There must be a previous identification of:
        - The healthcare provider and its role. It would also be desirable to have some kind of integration with their Information Systems in order to do the final transfer of the data to them.
        - The elderly home organisation. Taking into account
            - Staff
                - The healthcare staff (a pre-requisite).
                - The non-healthcare staff (Contact center)
            - Infrastructure
                - A PC to check the collected information
                - A mobile phone to receive the type 2 alarms
                - A wi-fi network / a data card to send the information
        - The technical support centre. In this case it was assumed by the healthcare organisation.
        - The ethics conditions under the specific environment.
    - The management of the elderly home must be informed about, believe in the new service and support its deployment.
    - Training sessions and training materials must be prepared for all the professionals involved (specially for non healthcare professionals)
    - The new service must not be considered as a slight change. Specific tasks must be scheduled for healthcare and non healthcare staff at the elderly home. Time slots must be reserved for the service in the daily routine work.
    - Integration with the existing information systems from the healthcare organisation and the elderly homes from the residence is a must.
    - The change management must be made taking into account all the professionals involved and informing them about the added value for each of them.

- **Determining (easing and impeding) factors**

    - **Easing factors:** management concern, involvement of staff. Training.
    - **Impeding factors:** professional egos, slow answer to technological problems. The kind of organisation (public structures have been more reluctant to changes) should also be taken into account.

- **Direct and indirect results**
  - Direct results:
    - More specialization of professionals
    - More safety for patients
    - Transfer of cost from the healthcare organisation to the elderly home
  - Indirect results
    - More satisfaction of users
    - More quality of life for patients
    - A distinguishing service for an elderly home

- **Possibilities born from this initiative:** spin-offs, potential markets, creation of new work positions. The new service could be provided by the personnel of the elderly home but it could also be provided by an external company that might assume any of the roles described in the above sections.

3.4.2.6.- Main conclusions

- It is necessary to **create culture** to facilitate the change management
  - To work on the ego management. Each group of participant must be able to see the added value of the solution for them. The transfer of activity should be seen as an opportunity and never as a risk.
  - Training and support are necessary to create an environment of trust and confidence on the technology and on the new service.
  - The new service implies
    - The transfer of the activity (and the costs) from the healthcare sector to the non health care sector.
    - The transmission of the task "vital signs capture" from a "high skilled professional" to a non-specialized profile.
  - A vision of the whole picture and not about specific problems is needed. The evolution towards vertical and horizontal integration of services is necessary to improve the effectiveness and efficiency of the organizations.

- The quality of life of the final users is enhanced with the new service: there is an improvement of the self- conception of safety, the perception of the quality of attention received and there are clinical findings that impact directly on prevention.

- The technology is ready and mature. Integration with the existing information systems (also those at the elderly home) is a must

- The overall assessment of the new service is positive. The lack of health intermediate results does not allow an evaluation under the therapeutic neither under the palliative perspectives.

- The service is considered as an added value.

3.4.3.- GEMSA: Home Hospitalisation Pays Couserans

The main goal of this application was to provide a **technological platform that would ease the management of the information related to patients included in the Home Hospitalization service.**

The Home Hospitalization service takes care of frail patients with specific pathologies who instead of being admitted at the hospital are treated at home with specific staff and resources. This is particularly important at rural areas located at the mountainous Systems, as the Pyrenees where the communications are poorer than at other locations.

3.4.3.1.- GEMSA Descriptive Form (summary)

The complete version of this form can be checked on annex 5.2.

Name of the application: Non-physical Health Record around the patient in Home Hospitalisation

Promoters of the project: Syndicat Mixte du Pays Couserans

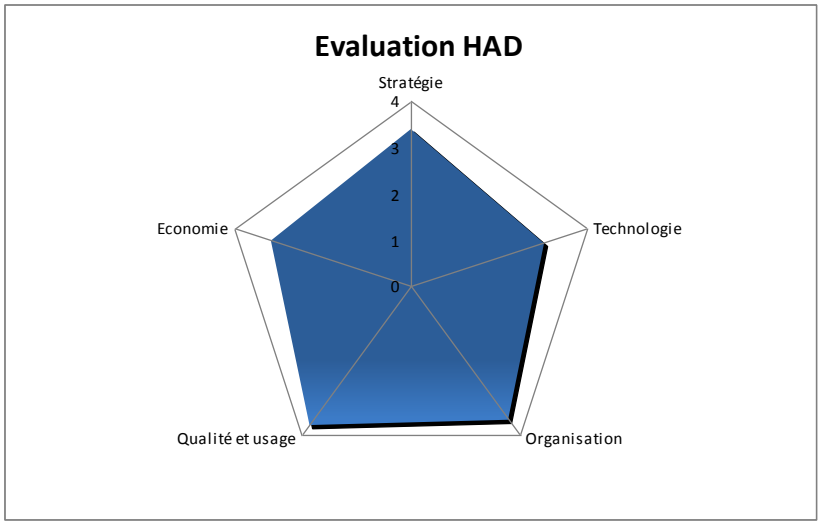
Public needs treated:

- Health care of frail patient within the context of a Home Hospitalisation Service in the environment of a rural and mountainous area.

Added value:

- Improvement of the follow-up and the coordination of the different stakeholders at the patient's home.

3.4.3.2.- Evaluation Chart



Picture 16: Gemsa Evaluation Chart Home Hospitalisation Pays Couserans

The results from the GEMSA evaluation grid show a high performance in the five axes examined, especially in the Quality and Use and Organization ones.

- The **quality and use impact indicator** has a high value that is based on the opinions of the professionals and of the stakeholders involved.

- The **organizational impact** is high as the solution contributes to the coordination of tasks between professionals and the sharing of information not only "on-site" at the patient home but also from other locations.

- The **technological innovation** has a medium score at the evaluation grid. The technology used for this experience (monitoring devices, tablet PCs) is being tested and evaluated during the project at the institution, but it does not include devices or technology that has not been previously tested at other locations.

- The **strategy evaluation** achieves a high score which relies on the experience of the promoters at implementing the Home Hospitalization service. It includes high also values in the macro-economic questions (reduction of costs) and at the participation of different professionals and the collaboration of the healthcare institutions.

- The **economic score** is medium as the experience does not include a specific analysis of the impact of the solution in the economic field. Nevertheless, the service implemented already uses tools to evaluate in detail the quality and the costs of service provided (despite the fact that they are not included in the final conclusions of the project).

3.4.3.3.- Evaluation Methodology and Results

3.4.3.3.1.- Methodology

The main goal of the project was **to gather the relevant physiological data** at home of the patients included in the "Home Hospitalisation" service in the context of a follow-up of undetermined length. The operational mode chosen should:

- Gather the information in a reliable way
- Register and record the information in real time, in a centralized way and organized by patient
- Ease the management of the data in real time at individual level.

The chosen process should be sustainable in terms of usage and easy to integrate into routine practice.

The tool should be a real link between the coordination of the Home Hospitalization Service and the care providers (Practitioners, nurses,…) in real time, through an application of care management. This tool should be able: to adapt the care plan, to

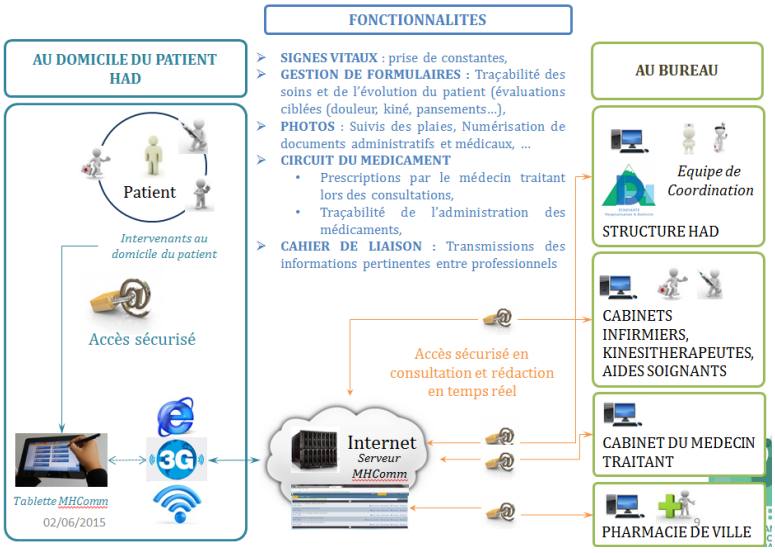
ensure the follow-up of the vital signs, to guarantee the traceability of the actions and to preserve the security of the medicines pathway.

Target group: patients with acute pathologies or with chronic progressive pathologies or / at unstable phases.

The methodology followed included the following steps

- Provision of 5 tablet PCs to do the evaluation at Home Hospitalisation (HH)
- Selection of patients:
  - Location: Saint Girons and surrounding area
  - Patients already included in HH, who know the service and the carers
  - Chronic pathology
  - Patients without a high demand of care services
  - Carers with a high degree of implication and a good attitude.
- Checking of the connection
  - 3G Connection or WiFi from the patient home
  - Information to the patient and his / her entourage, explicit consent
- Parametrization of the tool for each patient
  - Patient data
  - Carers
  - Profiles and rights of access
  - Forms
- Training of carers.
  - 250 potential carers at the Couserans area. 100 at the experimentation area.
  - Different profiles: Practitioners, physiotherapists, nurses, coordination HH
- Set up of the tablet PC at the patient's home.

3.4.3.3.2.- Results



Picture 17: Results from the HH experimentation at Couserans

Problems found:

- Parameterization of the server
- Training of professionals
- Connection to the network at the patient's home
- Ergonomics of the solution (to install the tablet in the home environment)

Next steps:

- Identification by card
- Interoperability with another platforms used at HH
- Access to the HH protocols from the tablet PC

3.4.4.- GEMSA: Tele-surveillance of people living at Elderly Homes

3.4.4.1.- GEMSA Descriptive Form (summary)

The complete version of this form can be checked on annex 5.3.

Name of the application: Tele-surveillance of residents and management of emergencies at elderly homes

Promoters of the project: Pays Couserans

Public needs treated: Health Care of frail patients living at elderly homes at rural and mountainous areas

Added value: To perform an assessment and follow-up of the vital signs of frail patients by the carers at their location (elderly home)

Generic Goals:

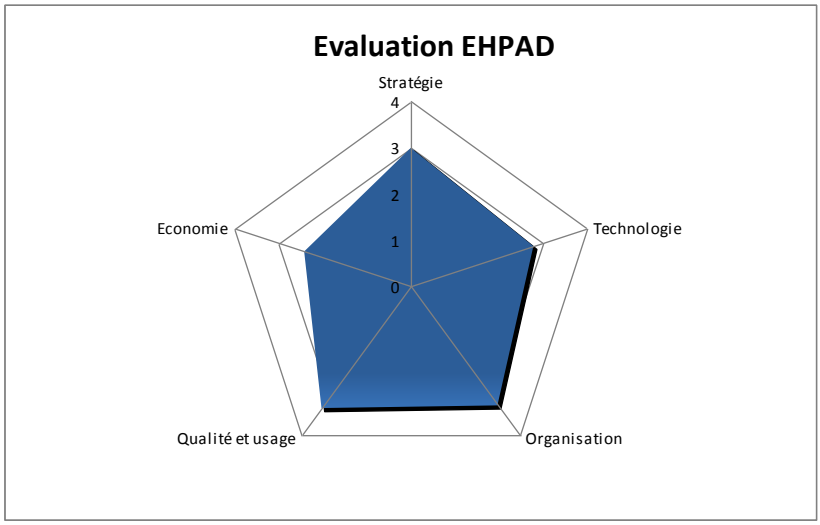
- To improve the link between the village and the hospital
- To improve the territorial link among the different actors of the care chain
- To be attractive for young practitioners by enhancing the organization with new structures and the use of TICs

Specific Goals of the telemonitoring service:

- To achieve a specific regulation about the emergencies
- To adapt the care models to the elderly homes
- To schedule the modes of transportation if necessary
- To increase the safety of the network of specialists included in the emergency chain
- To answer to the needs of care continuity within a specific geographical context for a population with a pre-defined risk profile
- To schedule the admissions and to allow, especially for elderly people, the access to specialist consultations without the need of transportation.

In order to achieve these goals, the main task is to choose the more adequate technology in terms of the needs of the participants and the easy and fast use. This should be done with the collaboration of the professionals and local stakeholders. It is also necessary to train the participants with specific sessions and materials.

3.4.4.2.- Results from the Evaluation Grid



Picture 18: GEMSA Evaluation Chart EHPAD Pays Couserans

The results from the GEMSA evaluation grid show a medium-high performance in the axes examined, as the solution tested has not been fully operational and it has been more oriented to the design and the adaptation of an existing tool (tablet PC software to capture vital signs and to register patient information) to a new environment (the elderly homes)

- The **quality and use impact indicator** has a high value that is based on the satisfaction of the participants. All the stakeholders implied have participated in the design and the specification of the new functionalities.

- The **organizational impact** is high as the solution contributes to improve the coordination between General Practitioners, Emergency Services and Specialists.

- The **technological innovation** has a medium score at the evaluation grid. The technology used for the project is the same as for the Home Hospitalization service and it only incorporates improvements necessary for this service.

- The **strategy evaluation** shows a medium impact of the project contribution to solve a problem of public policy in the social and healthcare fields. Despite the fact that the treatment of chronic patients is a topic of high importance in the management of the healthcare organizations, the elderly homes represent only a subset of the whole picture.

- The **economic indicator** has the lowest value within the evaluation grid. This is due to the fact that no economic analysis has been made in this case. In spite of this, all the improvements and the new functionalities are expected to contribute to the sustainability of the service, to the reduction of costs and to improve the service provided.

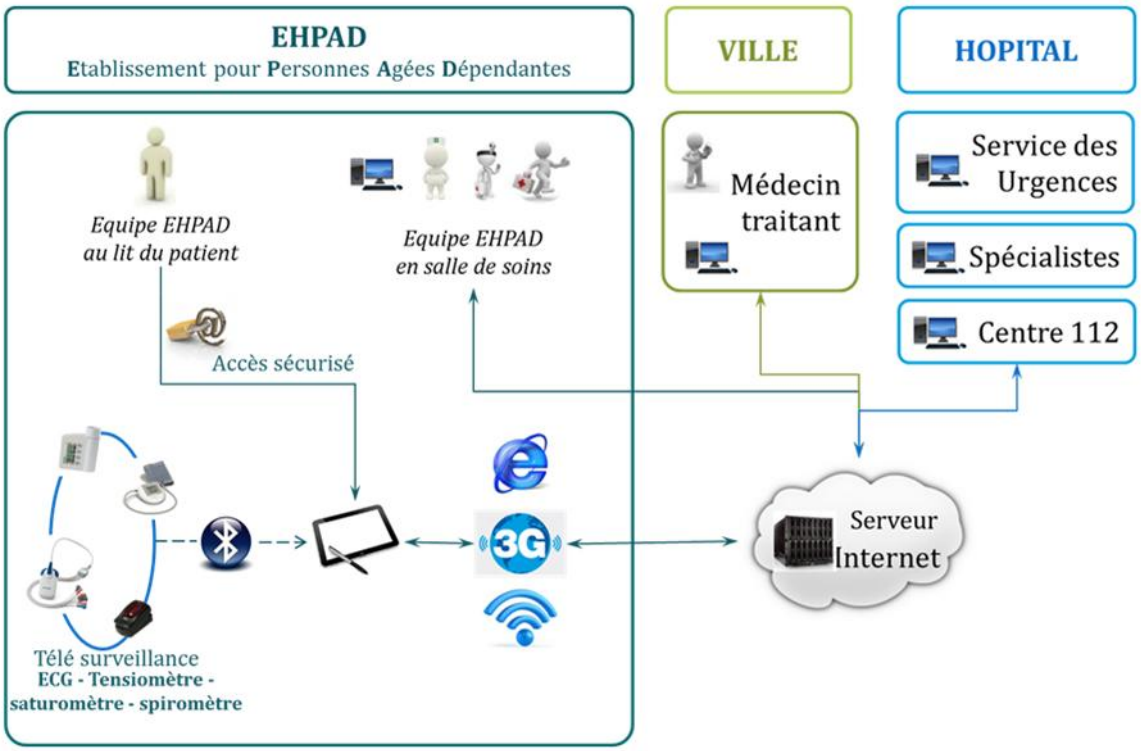
3.4.4.3.- Evaluation Methodology and Results

3.4.4.3.1.- Methodology

The local actors. The experimentation took place at the EHPAD (Etablissement pour Personnes Agées Dépendantes – Establishment for dependent elderly people) at Saint Girons, with the involved staff and volunteers: the coordinator doctor, the health coordinator and the nurses.

The target population. The selected patients were already living at the EHPADs, they were known by the care providers, they presented more than one chronic pathology and they were in frail condition.

The project includes the management of: emergency situations, tele-consultations, scheduled admissions and the enhancement of the Health Record of the patients living at the elderly home.



Picture 19: Results from the EHPAD experimentation at Couserans

3.4.4.3.2.- Results

- Multi-patient solution. More than one Health Record is accessible through a unique device. The traceability of the administration by the carers has also be improved
- Management of the prescriptions. It is possible to integrate the prescriptions into the medicines pathway through the application
- Care plan. Inclusion of the tasks to be performed by the carers, depending on the professional profile
- Access to the central database of medicine Claude Bernard to integrate drugs information
- Inclusion of a therapeutic book for the pharmacies
- Signature of the "confidentiality agreement" for the transmission of interoperability protocols.
- Parameterization of the ECG.
- The link with all the stakeholders in the delivery care chain has not been made operational yet with this material.

3.4.5.- GEMSA: VITLAB Zamora

3.4.5.1.- GEMSA Descriptive Form (summary)

VITLAB is an **open innovation platform** to promote an innovation ecosystem in the fields of e-Health and e-Inclusion through collaborative innovation processes. These processes are based on the capabilities of different agents involved in the development of methodologies, tools and structures oriented to the co-creation of solutions in response to the main challenges experienced by the SUDOE countries in these thematic fields. VITLAB is the visible face of the e-Resater Ecosystem.

The complete version of this form can be checked on annex 5.4.

Name of the application: Virtual Lab for Health and Life
Promoters of the project: INTRAS supported by all partners

Public needs treated:

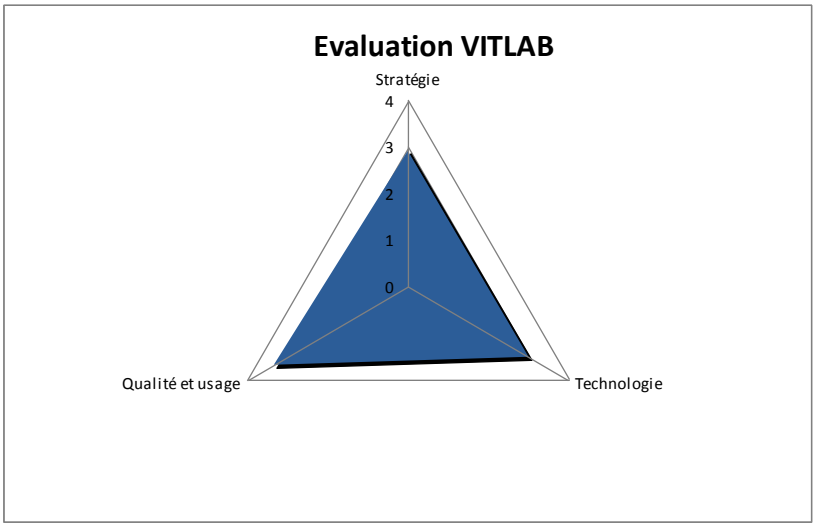
- Raise awareness and promote combined processes and policies for a better balance supply and demand, through participatory and results-oriented approaches open to the entire value chain/stakeholders (support the technology development, suited and centered in the user needs);
- Sustaining the technological offer in a competent and interoperable (in a technical and human level) innovation network.

Added value:

- Transpose the e-Resater Quadruple Helix of Innovation to a Co-Working Virtual Environment based on Open Innovation Processes, Information, Tools and Opportunities to bridge the gap decreasing distance and encouraging collaboration;
- Strengthening the e-Resater Knowledge Network encouraging a genuine Open-Innovation and Collaborative ecosystem;
- Flexible Guiding Methodology allowing an Horizontal management by the different partners and e-Resater InnoHub's and services customization (network, content, and resources are continuously changing and improving, given the opportunity for reflecting the growth of local ecosystems and the services offered by each InnoHub and by the network itself)**;**

In short, create value in terms of innovation in products and services, Methodological Innovation, Transfer of Innovation and know-how, Organizational Innovation, Social Innovation.

3.4.5.2.- Results from the Evaluation Grid



Picture 20: GEMSA Evaluation Chart VITLAB

The GEMSA analysis has been made under the axis of strategy, quality and technology. The organization and the economic axes have not been evaluated as this is not an application directly oriented to the use by healthcare providers in the delivery of healthcare services to patients.

- The **quality and use impact indicator** has a high value due to the fact that participation figures demonstrate high acceptance of the tool. The results of the Vitlab survey (http://vitlab.resater.eu) show that more than 50% of the people who have answered the questionnaire think that the VITLAB is an Excellent "Information portal and communication tool for open innovation"

- The **strategy axe** includes the evaluation under the professional impact perspective (high as many healthcare professionals and profiles are involved), frion the public service point of view (high as the vitlab has the spirit of being a universal tool) and under the controlled trial vision (low as it is not the kind of scientific trial that the GEMSA methodology would traditionally evaluate)

- The **technological innovation** has a medium-high score at the evaluation grid. The technology used for the project is open source based and it is in line with today's technological progress. Nevertheless, the CMS used is not a "technological innovation" on its own. The real innovation belongs to the ideas and the use that might come up with its use.

3.4.5.3.- Evaluation Methodology and Results

Evaluation and interactive validation of the VITLAB OI Methodology during the development and piloting process

a. Analysis of the adequacy of the structure and VITLAB base procedures defined;

b. Analysis of the limitations of using a Drupal System (core structure, e.g. compatibility of software components defined for the services provision) and other general specifications (issues, risks, solutions and lessons learned);

c. Usability Analysis of the website by experts for achieving minimum's required for a so Complex Web Platform / Virtual Lab;

d. Requirements analysis and monitoring activity promoted through the technical assistance procedures (CRM);

e. Users Satisfaction Evaluation Methodology[2]:

   - Was programmed a simple pool in the VITLAB portal for evaluating VITLAB content "What do you think about VITLAB as an information portal and communication tool for open innovation?" RESULTS: 53% Excellent; 27% Good; 14% Satisfactory; only 5% answered not so satisfactory. N= 2747 votes.

[22]Once VITLAB is not a Service uniquely promoted by one entity, being dependent of the Open Intervention of e-Resater partners and VITLAB members to which exist a procedure for assignation of roles was neither possible nor considered of interest to promote an evaluation protocol (rigid and time-consuming procedures with a discouragement effect on participation). VITLAB roles: VITLAB Administrator; e-Resater partner; e-Resater Participant with basic roles; VITLAB contributor with customized roles being given privilege access to services and areas of the web in which their contribution were valued as of great importance or required by the e-Resater, as is the case of experts). Find specifications in the VITLAB Operative Dossier for more detailed information.

- Response rate to requests sent by visitors / participants from VITLAB. RESULTS: 100%, ensured by daily check activity by the VITLAB Operative Team[3]

- Involvement of Stakeholders in the consultation process (face-to-face meeting, mailing informing about VITLAB and the e-Resater Initiative). Over 1200 contacts in the INTRAS mailing List; and from them 83 shown interest to know more and provide objective or subjective feedback about internal needs, information and services in which are or might be interested, also brief insights about participation tendencies and the adequacy of the VITLAB approach.

VITLAB is an open virtual space dedicated to exchange of information, practices and experiences, promoting active and open collaboration. Therefore, the e-Resater Knowledge Network and the broad community have been invited to participate providing their contribution for raising awareness / giving visibility about initiatives in the field of e-health and e-inclusion (local, regional, national, at the SUDOE level or even beyond the SUDOE space).

Picture 21: What is VITLAB

f. The consultation process results (with partners and stakeholders) facilitated the development and updating of the following documents: Strategic Plan of the Network of Regional Innohubs, and the e-Resater Operative Dosier.

[3] From 2014 to June of 2015 over 450 contacts to the VITLAB Administration Account admin.vitlab@intras.es were recorded: i. automated e-mails for validation of the registration; ii. e-mails asking for general information about VITLAB and services, e-Resater events as well as contact query requesting specific services (e.g. consultation with experts, opportunities for testing in real environments, digital catalog, explore opportunities for establishing synergies). The main doubts about VITLAB participation procedures were afterwards included in the VITLAB FAQ's (Frequently asked questions) and improvements were made in the VITLAB procedural documentation (e.g. Terms of Association, Privacy Policy) and new opportunities opened (e.g. request the creation of online questionnaires of satisfaction or interest in technology, giving simple and easily manageable opportunities to collect data and analyze the demand).

Vitlab Activity

VITLAB General Statistics (from 2014 to June 2015)

Total Visits:	**319248**
Total Visitants:	146714
Daily Visits	4732
Unique IP's:	44661
Total Page Visualization:	481391

Table 14: Vitlab General Statistics

VITLAB and e-Resater InnoHub recognized by the Enoll Network in the 8th wave (European Network of Living Labs)

Picture 22: Vitlab at the OpenLiving Lab Days

The ENoLL Network, a prestige network over the world, recognized in 2014 the excellence of the VITLAB methodology& Ecosystem as well as the work of the e-Resater InnoHub host by INTRAS, the only Living Lab with particular focus on health in the region of Castilla y León.

PHOTO: INTRAS consolidated the participation in the Enoll Network thanking the recognition awarded through the voice of the INTRAS General Manager (Mr. Pablo Gómez Conejo) in the OpenLivingLab Days 2014 held in Amsterdam.

Synergies across Networks, Projects and Initiatives

Collaborative alliances have been established to boost / intensify the Activity of the e-Resater Network (at a regional, national, SUDOE and European level) and the link with the e-Resater stakeholders, ensuring a delocalized planning and cooperation, supported by a consolidated methodological framework and an ecosystem, that is being at the same time reinforced with this strategic planning.

In this sense have been developed and planned research activities among other initiatives based on the collaboration and coordination with stakeholders, supported and facilitated by VITLAB.

Collaborative Synergies we established with Networks such as Enoll, AffeInnovnet and AgeingWell (see images of Tweets for a quick understanding about the mutual support promoted).

Picture 23: Vitlab tweets

Community Management Activities / Results:

VITLAB Campaigns	**3**
Communication Plan	1
VITLAB Terms of Association	1
VITLAB Private Policy	1
Associate Member Application Form (Entities / Professionals)	2
Ethics Code	1
Experts Statement (voluntary Participation)	1
E-Resater Operative Dossier	1
VITLAB Twiter (from April to June 2015) @VitlabOpenInnov ***Followers n= 40/ Tweets generated87***	1
VITLAB infographic	1
Week content updates: events, blog, relevant news in the fields of intervention and Observatory	+ 300 entries
Registrations Managed	68

Table 15: VITLAB Community Management Activities

SUSTAINABILITY:

- VITLAB resources & model will be capitalized through efforts for maintaining and seeking new synergies with projects, networks and other initiatives for a win-win collaboration. The most relevant services available are the access to an e-Health Solutions Catalogue, e-Resater Observatory, Offer and Demand Campaigns, TestBenchs, Consultancy Oriented e-Health Innovation Cycles, Public and Private Spaces Innovation.

- INTRAS is committed to continue hosting VITLAB. Symbolic Fees might be requested to members for maintenance services VITLAB resources will continue to be streamlined and promoted by its members and participants.

- Flexible General Business Model Planned, oriented to promote sustainable innovation as ultimate end, in the form of an umbrella for Independent Business Models associated with LL services promoted through VITLAB by Partners and Certified Members (InnoHub, Living Lab, FabLabs, User Centres, etc. with proved experience ensuring quality of services).

- VITLAB ensures minimum validation requirements and supervision. The management carried out by partners or members is at their own responsibility. The existence of an Expert Panel and facilitators (e-Resater partners) allow continue fostering VITLAB Model and objectives after the project end.

3.4.6.- GEMSA: Health and Social Coordination – Health Observatory

3.4.6.1.- GEMSA Descriptive Form (summary)

The complete version of this form can be checked on annex 6.5.

Name of the application: Health and Social coordination: Health Observatory

Promoters of the project: Asturias Regional Health Department and Municipalities from the Healthcare area II in Asturias. Management by FACC (Federación Asturiana de Concejos)

Public needs treated: Need for coordination of the services delivered to inhabitants at a rural area belonging to different providers (healthcare service, social services, and municipalities)

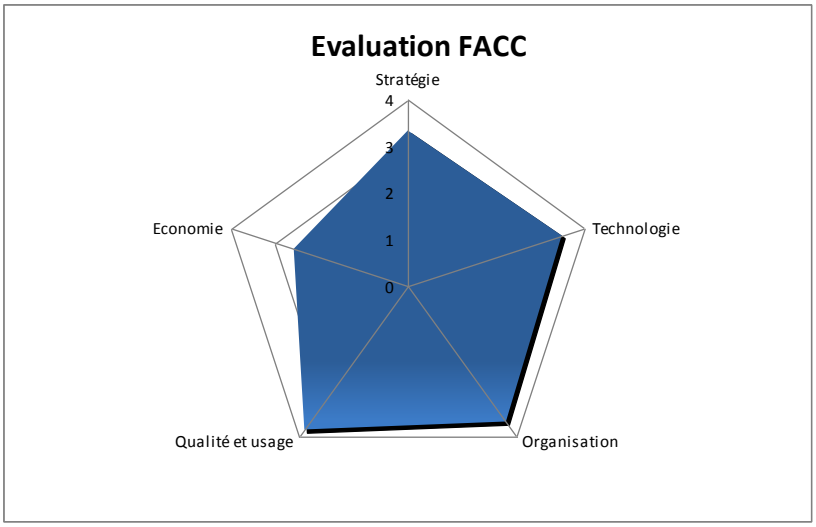
Added value:

- Generalization of the local networks of health and social coordination by processes of participation and the use of new technologies
- To promote healthy habits and active ageing in the population
- The use of new technologies as a basic support tool.

The activities carried out in the context of this experience are:

- Establishment of local participation groups at each municipality in the healthcare area.
- Local assessment at each municipality in the area: map of health and social resources
- Integration of a direct link to the database of community activities "Asturias actua en Salud" in the Health Electronic Record OMI-AP.
- Enhancement of the forms and the databases "Asturias Actúa en Salud" and its interface through the web. Development and update of the apps for Android and iOS.

3.4.6.2.- Evaluation Chart



Picture 24: Gemsa Evaluation Chart FACC

The results from the GEMSA evaluation grid show a high performance in four out of the five axes examined. The economic analysis is the one that achieves a lower performance.

- The **quality and use impact indicator** has a high value that is based on the number of professionals involved, and on the assessment of their opinions through a questionnaire which can be checked in the next section.

- The **organizational impact** is high as the solution contributes to the integration of information from different types stakeholders belonging to different organizations and models. This model also increases the concern and the knowledge between the social and healthcare silos.

- The **technological innovation** has also a high score at the evaluation grid. The different platforms in which the solution has been presented (web browser, Android devices and iOS) and the integration with the OMI-AP application are the main technological characteristics to be taken into account.

- The **strategy evaluation** depicts also a high impact of the project contribution to solve a problem of public policy in the social and healthcare fields. The FACC approach integrates different levels of public governments working together (the healthcare regional organization and the municipalities at local level) and it also integrates professionals and institutions from different sectors. The value under this axe is not higher because this experience is neither a clinical trial nor a traditional specific healthcare intervention.

- The **economic indicator** has the lowest value within the FACC grid. This is due to the fact that no specific economic assessment has been made for this kind of application.

3.4.6.3.- Evaluation Methodology and Results

The figures that summarize the experience in Asturias are shown in the following list:

- Number of sessions : 32
- Number of healthcare centres which have participated at the pilot experience: 4 (Siero, Arriondas, Tineo, El Coto)
- Number of healthcare professionals who have participated at the introductory sessions: 93
- Number of professionals who have participated at the training sessions: 66
- Systems of local management in place: 2 (Tineo and Parres)
- Healthcare Areas with the OMI service up and running: 8 (Allande, Cangas de Narcea, Ibias, Degaña, Tineo, Siero, El Coto y Parres)
- Heatlhcare areas with the OMI service set up: 84 (100%)
- Resources identified in the database (7/7/2015): 243 active and 0 inactive
- Activities identified in the database (7/7/2015): 190 active and 96 inactive

The information included in this assessment was gathered from the 4 participating healthcare centres by means of an auto-administrated survey and of two face to face meetings with the Primary Care Teams. All the staff from the healthcare centres was invited to participate in these meetings.

- Sample: 60 professionals participated at the study (answer rate: 65%)
- Socio-demographic data
    - Average age: 47,9 years (standard deviation : 10.4 years). Minimum age: 25 years, maximum age: 62 years
    - Distribution by gender: 75 % female and 25% male
    - Time working for the SESPA (public healthcare service from Asturias): 10 % between 5 and 15 years, 30% between 16 and 25 years and 41,7% more than 25 years
    - Professional profile: 50 % GPs, 45% nurses, 3’3% social workers and 1’7% administrative staff

Results of the survey (0 = Totally disagree / Nothing - 10 = Totally agree/All)	
Questions related to the OBSA (Asturias Health Observatory)	
¿Do you know the "Asturias Health Observatory"?	5'07
¿Do you know the community activities "Asturias Actúa en Salud" (Asturias acts in health?	4'35
Questions related to the work performed	
Satisfaction with the kind of work	7'64
Quality of life in my job	6'88
Quantity of work	7.38
Assessment of the support from my managers /leaders	5'7
Assessment of the support from my workmates	7'5
Questions related to the family and community advice at the consultation	
Knowledge about information and data that allow the awareness of the health condition of the population of your area	5'83
Knowledge about the resources and community activities that exist at your health area	5'9
Approach to the healthcare problems from a bio-psycho-social structured model	3'68
Approach to the healthcare problems from a family intervention in a structured way	5'36
Use of a model of brief advice and health education in a structured way	6'51
Advice in the clinical practice of resources or community activities as therapeutic and non pharmacological actions	6'72
Training about bio-psycho-social approach	4'97
Training in health education and brief advice	5'22
Participation in interventions about Heath Education groups at the healthcare Centre	4'64
Questions related to the community advice outside the consultations	
Time available to perform community activities	3'83
Participation in the performance of community activities in other sectors of the community	3'9
Training in community methodology	3'97

Table 16: Survey and results about the application "Health Observatory" in Asturias

A regression logistic analysis has been performed so as to study which variables might have a higher weight independently in the performance of the community activities (CAs). The variables identified in this analysis with more weight in the performance of CAs are the support from the leaders and the mates and the training received.

There is an affirmative relationship between the positive feedback from the superiors and the training in community methodology, that is to say, the better feedback and the more training the professionals receive, the more community activities they perform.
The feedback from the workmates is seen as a negative relationship, i.e. the more community's activities a professional performs, the worse impression he/she receives from his/her workmates. This fact could be related to some comments gathered from the healthcare professionals. The activities performed outside the healthcare center are seen sometimes as "personal projects" and they could also lead to overload of the other professionals agenda.

A second assessment meeting took place after the survey. The main goal of this meeting was to gather impressions in order to improve the project development. Some of the conclusions of these meetings are listed below:

- Main strengths
  - Improvement of the knowledge of the community resources
  - Highlighting of the actions performed by institutions
  - To bring together agents working at different fields
  - Improvement of the therapeutic range to deal with the problems of patients
- Main weaknesses (and suggestions)
  - Technology – Communications
    - The connection speed from OMI is through an external URL. The process for loading the map and the web browser activation use too many resources and expands too much the page load process
    - Waiting times for consultations
  - Search, visualization and classification system
    - The search consultation is too generic
    - In some pdfs and summary forms some important information is lacking as the contact telephone number
    - The search engine does not perform correctly the free text in some fields
    - The number of categories and the characteristics of this classification could be improved.
    - It would be positive to have the opportunity to make an assessment of the activity / resource from the patient side and also from the professional point of view
    - The summary listing of community activities could have a “pop-up” with a brief description of the activity
    - A geographical filter by ZBS when there are many activities (by neighborhood, by location and by distance)
  - Development of professional skills
    - Lack of awareness about the importance/need of including this kind of advice in the routine practice
    - Lack of training in community methodology
    - Lack of training in models of bio-psico-social attention and about brief family intervention.
    - There is no process for social prescription and standardized record in OMI-AP
  - Work context
    - Lack of time for this kind of tasks in the consultation
    - Lack of support and leadership from the workmates and from the superiors

3.4.6.4.- Main conclusions

- The **degree of utilization** of the tools at the healthcare centres by the healthcare staff was low and more oriented to information consultations rather than to social prescription. The main reasons for this result could be the problems related to technology and the perception of low applicability at the clinic context.
- The **usage level** was high at healthcare centres with nursery staff receiving training (EIR) and also to identify assets in the associative and municipal scopes.
- A **better knowledge about the community resources** is a must but not the only condition to improve the problems management from a community approach.
- The **organization of agendas** is necessary to reduce the negative impact on the work load and the personal satisfaction.
- The **technology** is an enabler for the change management in the attention model, but it is not the only requisite. The main driver for this change is the involvement of the healthcare professionals, the patients and the citizenship.
- **Social prescription** is restricted to some conditions related to patients and their environment, and its use could not be considered as generic.
- In order to guarantee the sustainability of the model, it is necessary to facilitate and to promote the dynamization of community spaces at local level through structures that act in a coordinated way easing the conditions for a good local management.
- A set of **guidelines** for the improvement and the deployment of the service has been presented.

3.4.7.- GEMSA: "Dossier Medico-Sociale partagé"

3.4.7.1.- General Description based on the GEMSA Form

The complete version of this form can be checked on annex 6.6.

Name of the application: Shared Health and Social Record for Multi-Professional access
Promoters of the project: Syndicat Mixte du Pays Couserans

Public needs treated: To lessen the number of breaks in the healthcare pathway of a patient and to facilitate the interchange of information

Added value: Identification of the information to be consulted by each stakeholder and the means to interchange this information.

This initiative has been developed in the context of the MAIA (Method of Action and of Integration of the actors involved in the Home Provision of care) to ease the maintenance of the autonomy at home.

The final goal is to provide, around the whole territory, a coordinated answer adapted to the users' needs by integrating the information from all the health, social and mixed providers from the territory.

The target public are the elderly people, the handicapped people and the people with chronic conditions under evaluation or unstable.

The workgroup relies on the existing workgroups of the MAIA.

3.4.7.2.- Evaluation Methodology and Results

The results from this initiative are:

- The development of a map with the exchanges of information
- The development of a "terms and conditions" document from a previous version
- The specification of profiles and permissions
- The listing of the reference resources

These documents are the base for the design of the new platform and have been transmitted to the manager of the regional information systems to include them in the regional specifications.

The project is in an initial phase and this is the reason why it is not possible to make a deeper analysis of the results.

4.- Conclusions

4.1.- e-RESATER results

The main achievements of e-RESATER concern qualitative issues such as the interchange of knowledge, the progress, the advantages and the new contacts. The main outcomes of e-RESATER can be summarized broadly into three achievements:

- **The initial RESATER** network has been broadened and enhanced with hundreds of participants at several events. The transnational, national, regional and local interactions that have resulted from the workshops, activities and the participation at the VITLAB are the evidence of the vivacity of this consolidated structure.

- **Local Applications.** Six different applications related to telemedicine have been adapted, developed, set up and evaluated, in practice, in rural areas in the context of e-RESATER. The most important outcome of these activities has been the sharing of the information within the e-RESATER network in order to allow the improvement and scaling up of these initiatives to other areas of these initiatives. One indicator of the quality of the work developed is for instance the

award "Excellent project in Aragón" at the "XIII Regional Congress about Quality in Health". Besides these activities, an open innovation methodology has been designed and initiated and there has been a deep cooperation with SMEs at local level in order to interchange knowledge and to reduce the gap between the supply and the demand sides.

- **VITLAB:** http://vitlab.resater.eu. The VITLAB is the most tangible result of e-RESATER. It is not only an information portal and a communication tool for open innovation. It is also the place where the results of the local experimentations have been published and the reference site for the members of the knowledge network. Its inclusion in the ENOLL (European Network of Living Labs) is only an indicator of the usefulness of this tool.

4.2.- Experts advise

[Experts input]. The discussion related to the three groups of indicators: global, open innovation and "tailored" GEMSA brings up many important ideas.

The operability of all the projects within e-RESATER has been demonstrated, and must be continued and followed up. The convergence of the evaluation axis results proves the similarity of the expected impacts.

The capability of GEMSA to be adapted depending on the kind of projects allows at the same time a qualitative auto-evaluation for each project and transversal assessment through different initiatives.

GEMSA grid is a self-assessment tool which helps each local experiment to identify the future improvements. The impact is that all stakeholders had to work together in order to better fulfill the axis. In all the implementations, the economic axis has to be improved.

In spite of the fact that the time restrictions haven't allowed the knowledge of the inner operation of each project, it has been demonstrated that all the initiatives have surpassed a maturity threshold and a minimum set of requirements. The experimentations have a set of results and lessons learnt that could be presented to the authorities and/ or to other potential partners.

The performance under the axis **« Quality and Usage »** (GEMSA) must be highlighted with the global indicators (results and impact) and also the values under the "Technology" and "Organization" axes. It is certain that a deeper analysis of each internal auto-assessment would provide much more interesting information.

The **"Organization"** axis is quite important for telemedicine and shows the stakeholders implications and satisfaction. It is quite standard to evaluate that based on satisfaction

questionnaires as Aragon made. The clinical and economic impact have been evaluated by SALUD and presented in this report.

Without making a deep analysis about the dimensions "**Strategy" and "Economy",** the latter is by far the most difficult to be evaluated under the environment of innovation. This is the reason why it must not now become an obstacle.

In order to complete now the economic axis, e-Resater promoters have to formalize medico-economic protocols. It will be necessary to identify the most cost-effectiveness practices and choice the better business model.

To conclude, the projects in telemedicine are becoming an operational fact. They must be followed up and scaled up outside the rural territories that have triggered them. New challenges as changes in the practices and in the care models will be met in the very near future.

5.- Annex I. GEMSA Evaluation Forms

5.1.- Evaluation Form Aragón

Ficha descriptiva GEMSA
V1, Febrero 2015
e- RESATER SOE3/P1/F682,
Programme INTERREG IV B SUDOE

Ficha descriptiva de aplicación para evaluación según metodología GEMSA[1]

Proyecto e-RESATER. Socios SALUD (Servicio Aragonés de Salud) y Fundación Desarrollo Social (FDS)

Ficha descriptiva de su sistema / dispositivo / aplicación

Nombre del sistema/dispositivo/aplicación:
Sistema de Telemonitorización en residencias de ancianos
Nombre del promotor del proyecto:
Consorcio e-RESATER (socios Sector Sanitario de Barbastro y FDS)
Institución del promotor del proyecto: Servicio Aragonés de Salud
Región del promotor del proyecto: Aragón (España)

¿Cuales son las necesidades en política pública que su sistema/dispositivo/aplicación pretende tratar?

- Telemonitorización de pacientes crónicos
- Acercamiento de atención sanitaria a residencias de ancianos
- Acercamiento de atención sanitaria a núcleos rurales

¿Qué aporta su sistema/dispositivo/aplicación para tratar la problemática precedente?

- Transferencia de competencias del sector sanitario al tercer sector (toma de constantes)
- El almacenamiento y procesamiento automático de las pautas y de las medidas de constantes vitales.

El sistema se basa en financiaciones conseguidas de:
☑ instancias europeas citarlas: INTERREG IV B SUDOE Importe: 75 %
☑ instancias regionales citarlas: SALUD Importe:
☑ instancias locales citarlas: FDS/Gestores residencias Importe:

Actores implicados

¿Quien es el usuario final de la aplicación?:
☑ el paciente -> Personal implicado: Durante todo el periodo
☑ el auxliliar/gerocultor -> Personal implicado: Durante todo el periodo
☑ el equipo de salud AP -> Personal implicado: Durante todo el periodo
☑ el profesional sanitario de la residencia-> Personal implicado: Durante todo el periodo

¿Cuales son los profesionales de la salud concernidos?:
☑ equipo de AP (enfermero, médico) -> Personal implicado: Durante todo el periodo
☑ equipo sanitario residencia -> Personal implicado: Durante todo el periodo

¿Cuales son los profesionales medico-sociales concernidos?:
☑ auxiliar/gerocultor -> Personal implicado: Durante todo el periodo

El sistema/dispositivo/aplicación es:
☑ regional
☐ interregional
☐ nacional
☐ internacional

1

Ficha descriptiva GEMSA
V1, Febrero 2015
e- RESATER SOE3/P1/F682,
Programme INTERREG IV B SUDOE

¿Cual es el centro de referencia?:
Sector Sanitario Barbastro / Hospital de Barbastro

- Centro de salud de Binéfar
- Centro de salud de Tamarite (Consultorio de Albelda)
- Centro de salud de Graus (Consultorio de Campo)

Número de centros referencia:
3 (Centro de salud de Binéfar, Consultorio de Albelda, Consultorio de Campo)
Número de centros periféricos o domicilios concernidos:

- Residencia Comarcal de Binéfar
- Residencia La Sabina de Albelda
- Residencia "Valle de Ésera" de Campo

Perfil de acción / riesgo

El sistema/ dispositivo/aplicación concierne (varias opciones posibles)
☑ la consulta / el diagnostico
☐ la vigilancia
☐ la asistencia
☐ una intervención (?)
☑ otro: monitorización

¿Cual es la especialidad concernida? Medicina de familia / Pacientes crónicos

¿Cual es la población concernida?:
☐ toda la población
☐ los jóvenes/niños
☐ los adultos
☑ las personas mayores
☐ las personas con discapacidad
☑ las personas que padecen una enfermedad crónica (citarla: alguna entre historia de DM, ACV, IAM, EPOC o HIC)
☐ otros: _____

El ámbito de aplicación del sistema/dispositivo/aplicación:
☐ interno en un establecimiento de atención sanitaria
☐ entre establecimientos de atención sanitaria
☐ red ciudad/hospital
☐ HAD, hospitalización a domicilio
☐ práctica ambulatoria
☑ otro: Residencia de ancianos /

Número de pacientes concernidos (al año/al mes/semanalmente):
25 (Campo) + 50 (Albelda) + 80 (Binéfar)

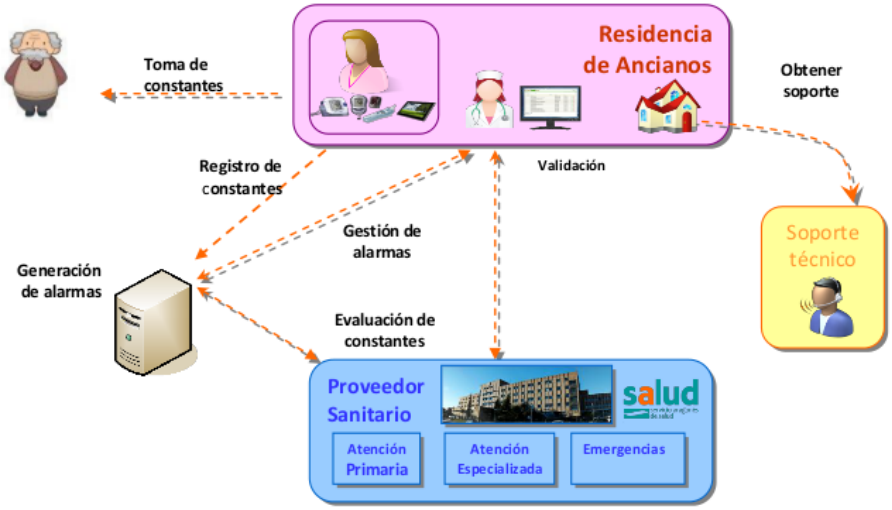
2

Ficha descriptiva GEMSA
V1, Febrero 2015
e- RESATER SOE3/P1/F682,
Programme INTERREG IV B SUDOE

Localización de los equipamientos (principalmente)

¿Donde se encuentran los equipamientos?
☐ el paciente los lleva encima
☐ en el domicilio del paciente
☑ en institución para larga estancia (Residencia)
☑ en la consulta del profesional
☐ en una estructura de cuidados
☐ en un tercero tecnológico
☐ otro: _____

Precise las características técnicas o arquitectónicas clave de su programa/dispositivo/aplicación (adjuntar eventualmente un esquema descriptivo):



Los dispositivos que se utilizan para la recogida de constantes vitales son: glucómetro, tensiómetro, pulsioxímetro, termómetro timpánico y electrocardiógrafo. Estos dispositivos se conectan de forma inalámbrica con un tablet PC que a su vez envía la información recogida a los sistemas de información del Servicio de Salud.

Tiempo

¿En qué momento del ciclo de vida se encuentra su sistema/dispositivo/aplicación?
☐ pre-proyecto
☐ proyecto piloto
☑ pre-generalización
☐ generalización
☐ industrialización

3

Ficha descriptiva GEMSA
V1, Febrero 2015
e- RESATER SOE3/P1/F682,
Programme INTERREG IV B SUDOE

¿Cual es el estado de madurez de su sistema/dispositivo/aplicación?:
☑ fase de aplicación
☐ en fase evaluación
☐ en fase de prototipado
☐ investigación

El sistema/dispositivo/aplicación funciona en:
☑ sincronía
☐ asincronía

El sistema/dispositivo/aplicación está destinado a una actividad:
☑ planificada
☐ de urgencia

Frecuencia de uso del sistema:
☐ diaria
☑ semanal (Según pauta)
☐ mensual
☐ anual

El sistema/dispositivo/aplicación es:
☑ reproductible
☐ puntual

Finalidades de la aplicación

El sistema/dispositivo/aplicación tiene como finalidad (varias respuestas posibles):
☑el bienestar
☑ la prevención
☑ el tratamiento de las enfermedades crónicas
☐ el tratamiento de las enfermedades agudas
☐ los cuidados paliativos
☐ otros: _____

Fecha del comienzo del sistema/dispositivo/aplicación: 1 de Abril de 2014
Fecha de fin del sistema/dispositivo/aplicación: 30 de Marzo de 2015

[1] https://recherche.telecom-bretagne.eu/gemsa

4

5.2.- Evaluation Form HAD Pays Couserans

Fiche descriptive GEMSA
V1, Février 2015
e- RESATER SOE3/P1/F682,
Programme INTERREG IV B SUDOE

Fiche descriptive de son système/dispositif/application pour l'evaluation avec la méthodologie GEMSA[1]

Projet e-RESATER. Partenaire Syndicat Mixte du Pays Couserans

GEMSA: Fiche descriptive de son système/dispositif/application

Nom du système/dispositif/application : Dossier dématérialisé auprès du patient en Hospitalisation A Domicile (HAD)

Nom du porteur : Syndicat Mixte du Pays Couserans
Institution du porteur : Fonction publique territoriale
Région du porteur : Couserans, Ariège, Midi- Pyrénées, France

Quelles sont les besoins de politique publique visés par votre système/dispositif/application ?
Prise en charge médicale de patients fragilisés lors d'un maintien à domicile (HAD) dans un bassin de santé rural et montagneux.

Quel est l'apport de votre système/dispositif/application par rapport à la problématique précédente ?
Amélioration du suivi et de la coordination des différents intervenants au domicile du patient.

Le système/dispositif/application est-il basé sur des financements obtenus auprès :

☑ Instances européennes	lesquelles :	INTERRREG IV B SUDOE	Montant : 75%
☐ Instances nationales	lesquelles :		Montant :
☐ Instances locales	lesquelles :		Montant :
☐ Industrie	lesquelles :		Montant :
☐ Associations	lesquelles :		Montant :
☐ Autre	lesquelles :		Montant :

Acteurs impliqués

Qui est l'utilisateur final de l'application:

☐ le patient	-> Effectifs concernés :en T0 : __Tfin : ____
☑ le professionnel de santé au chevet du patient	-> Effectifs concernés :en T0 : __Tfin : ____
☑ le professionnel de santé à distance	-> Effectifs concernés :en T0 : __Tfin : ____
☐ l'expert	-> Effectifs concernés :en T0 : __Tfin : ____
☐ un aidant	-> Effectifs concernés :en T0 : __Tfin : ____
☐ un autre prestataire de services : _____	-> Effectifs concernés :en T0 : __Tfin : ____

1

Fiche descriptive GEMSA
V1, Février 2015
e- RESATER SOE3/P1/F682,
Programme INTERREG IV B SUDOE

Quels sont les professionnels de santé concernés (plusieurs réponses possibles):

☐ médecin hospitalier	-> Effectifs concernés :en T0 : __Tfin : ____
☑ médecin libéral	-> Effectifs concernés :en T0 : __Tfin : ____
☑ infirmier(ère)	-> Effectifs concernés :en T0 : __Tfin : ____
☑ auxiliaire de santé	-> Effectifs concernés :en T0 : __Tfin : ____
☐ sage femmes	-> Effectifs concernés :en T0 : __Tfin : ____
☑ autres: Médecins coordonnateurs HAD, Infirmières Coordinatrices HAD, Conseillère en Economie Sociale et Familiale (CESF) HAD	-> Effectifs concernés :en T0 : __Tfin : ____

Quels sont les professionnels médico-sociaux concernés (plusieurs réponses possibles):

☑ assistance de vie	-> Effectifs concernés :en T0 : __Tfin : ____
☐ garde malade	-> Effectifs concernés :en T0 : __Tfin : ____
☑ kinésithérapeute	-> Effectifs concernés :en T0 : __Tfin : ____
☑ aide-soignante	-> Effectifs concernés :en T0 : __Tfin : ____
☐ aide-ménagère	-> Effectifs concernés :en T0 : __Tfin : ____
☐ pédicure	-> Effectifs concernés :en T0 : __Tfin : ____
☐ autres: _____	-> Effectifs concernés :en T0 : __Tfin : ____

Le système/dispositif/application est-il :
☑ Régional (local)
☐ Interrégional
☐ National
☐ International

Qui est le centre de référence: ECHOSANTE HAD
Nombre de centres référents: 1

Nombre de centres périphériques ou domiciles concernés: 5 patients par mois (Durée Moyenne de Séjours : 27 jours)

Profil d'action / risque

Le système/dispositif/application concerne-t-il (plusieurs options possibles) :
☑ La consultation / le diagnostic
☑ La surveillance
☐ L'assistance
☐ Une intervention (?)
☑ Autre: la coordination

Quelle est la spécialité concernée ? Médecine générale, Maladies chroniques

Quelle est la population concernée (plusieurs réponses possibles)? :
☐ Toute la population
☐ Les jeunes / enfants
☐ Les adultes
☐ Les personnes âgées
☐ Les personnes handicapées
☐ les personnes atteintes d'une maladie chronique (laquelle:)
☑ Autres: **Personnes atteintes de maladies aigües ou chroniques évolutives et/ou instables**

2

Fiche descriptive GEMSA
V1, Février 2015
e- RESATER SOE3/P1/F682,
Programme INTERREG IV B SUDOE

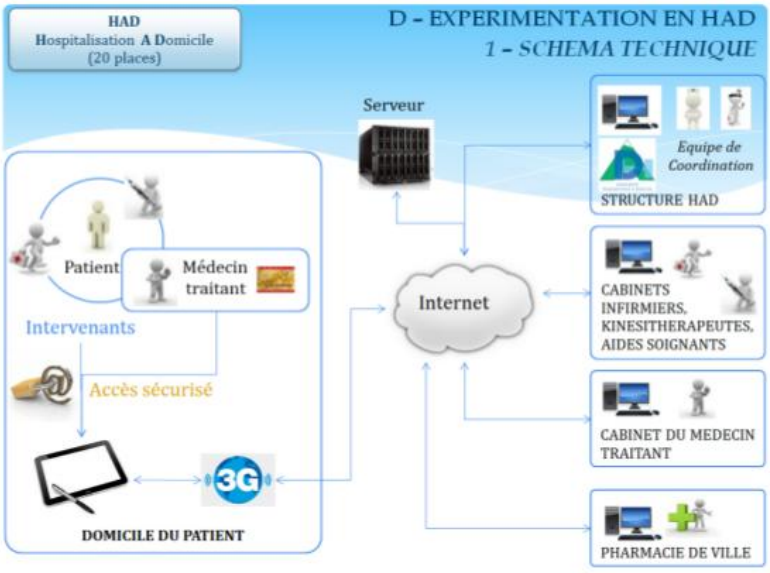
Le champ d'application du système/dispositif/application:
☐ Interne à un établissement de soins
☐ Entre établissements de soins
☐ Réseau ville-hôpital
☑ HAD, hospitalisation à domicile
☐ Pratique ambulatoire
☐ Autre : _____

Nombre de patients concernés (par an / par mois : par semaine):Environ 60 patients par an.

Localisation des équipements (principalement)

Où se trouvent les équipements (plusieurs réponses possibles) ?
☐ Sur le patient
☑ Chez le patient
☐ En institution de long séjour
☐ Au cabinet du professionnel
☐ Dans une structure de soin
☐ Chez un tiers technologique
☐ Autre : _____

Précisez les caractéristiques techniques ou architecturales clés de votre système/dispositif/application (joindre éventuellement un schéma descriptif)
La difficulté spécifique à l'HAD est d'utiliser un matériel déplaçable facilement et communiquant avec les divers intervenants du bassin de santé, donc avec un logiciel communiquant capable de centraliser les informations afin d'améliorer la coordination de l'ensemble des intervenants.



3

Fiche descriptive GEMSA
V1, Février 2015
e- RESATER SOE3/P1/F682,
Programme INTERREG IV B SUDOE

Temps

Dans quelle partie du cycle de vie se situe votre système/dispositif/application?
☐ Pré-projet
☑ Projet pilote
☐ Pré-généralisation
☐ Généralisation
☐ Production
☐ Industrialisation

Quel est l'état de maturité de votre système/dispositif/application:
☑ En application
☐ Evaluation
☐ Prototypage
☐ Recherche

Le système/dispositif/application fonctionne-t-il en :
☑ Synchrone
☐ Asynchrone

Le système/dispositif/application est destinée à une activité:
☑ Planifiée
☐ D'urgence

Fréquence d'utilisation du système:
☑ Quotidienne
☐ Hebdomadaire
☐ Mensuelle
☐ Annuelle

Le système/dispositif/application est-il :
☑ Reproductible
☐ De nature isolée

Finalités de l'application

Le système/dispositif/application a pour finalité (plusieurs réponses possibles):
☐ Le bien-être
☐ La prévention
☐ Le traitement des maladies chroniques
☐ Le traitement des maladies aiguës
☐ Les soins palliatifs
☑ Autres : Lien de coordination domicile / HAD, Sécurisation du circuit du médicament, Traçabilité.

Date de début du système/dispositif/application: le 01/07/2014 (1 tablette), le 01/02/2015 (5 tablettes)

[1] https://recherche.telecom-bretagne.eu/gemsa

4

5.3.- Evaluation Form EHPAD Pays Couserans

Fiche descriptive GEMSA
V1, Février 2015
e- RESATER SOE3/P1/F682,
Programme INTERREG IV B SUDOE

Fiche descriptive de son système/dispositif/application pour l'evaluation avec la méthodologie GEMSA[i]

Projet e-RESATER. Partenaire Syndicat Mixte du Pays Couserans

GEMSA: Fiche descriptive de son système/dispositif/application

Nom du système/dispositif/application: Télé surveillance de résidents à risque et régulation des situations d'urgence en Etablissement d'Hébergement pour Personnes Agées Dépendantes (EHPAD).

Nom du porteur: Syndicat Mixte du Pays Couserans
Institution du porteur : Fonction publique territoriale
Région du porteur : Couserans, Ariège, Midi Pyrénées, France

Quelles sont les besoins de politique publique visés par votre système/dispositif/application ?
Prise en charge médicale de patients fragilisés en domicile institutionnel (EHPAD) dans un bassin de santé rural et montagneux.

Quel est l'apport de votre système/dispositif/application par rapport à la problématique précédente ?
Réaliser une évaluation des fonctions vitales des patients à risques par le personnel soignant dans leur lieu de vie (en établissement).

Le système/dispositif/application est-il basé sur des financements obtenus auprès :

☑ Instances européennes	lesquelles : INTERRREG IV B SUDOE	Montant : 75%
☐ Instances nationales	lesquelles :	Montant :
☐ Instances locales	lesquelles :	Montant :
☐ Industrie	lesquelles :	Montant :
☐ Associations	lesquelles :	Montant :
☐ Autre	lesquelles :	Montant :

Acteurs impliqués

Qui est l'utilisateur final de l'application:

☐ Le patient	-> Effectifs concernés : en T0 : __Tfin : ____
☑ Le professionnel de santé au chevet du patient	-> Effectifs concernés : en T0 : __Tfin : ___
☑ Le professionnel de santé à distance	-> Effectifs concernés : en T0 : __Tfin : ____
☑ L'expert	-> Effectifs concernés : en T0 : __Tfin : ____
☐ Un aidant	-> Effectifs concernés : en T0 : __Tfin : ____
☐ Un autre prestataire de services : _____	-> Effectifs concernés : en T0 : __Tfin : ____

Quels sont les professionnels de santé concernés (plusieurs réponses possibles):

☑ médecin hospitalier	-> Effectifs concernés :en T0 : __Tfin : ____
☑ médecin libéral	-> Effectifs concernés :en T0 : __Tfin : ____
☑ infirmie(è)r(e)	-> Effectifs concernés :en T0 : __Tfin : ____
☐ auxiliaire de santé	-> Effectifs concernés :en T0 : __Tfin : ____
☐ sage femmes	-> Effectifs concernés :en T0 : __Tfin : ____
☐ autres: Médecin coordonnateur de l'EHPAD	-> Effectifs concernés :en T0 : __Tfin : ____

1

Fiche descriptive GEMSA
V1, Février 2015
e- RESATER SOE3/P1/F682,
Programme INTERREG IV B SUDOE

Quels sont les professionnels médico-sociaux concernés (plusieurs réponses possibles):

☐ assistance de vie	-> Effectifs concernés :en T0 : __Tfin : ____
☐ garde malade	-> Effectifs concernés :en T0 : __Tfin : ____
☐ kinésithérapeute	-> Effectifs concernés :en T0 : __Tfin : ____
☑ aide-soignante	-> Effectifs concernés :en T0 : __Tfin : ____
☐ aide-ménagère	-> Effectifs concernés :en T0 : __Tfin : ____
☐ pédicure	-> Effectifs concernés :en T0 : __Tfin : ____
☐ autres: _____	-> Effectifs concernés :en T0 : __Tfin : ____

Le système/dispositif/application est-il :
☑ Régional (local)
☐ Interrégional
☐ National
☐ International

Qui est le centre de référence : EHPAD (Etablissement d'Hébergement pour Personnes Agées Dépendantes) / CHAC (Centre Hospitalier Ariège Couserans)

Nombre de centres référents: 2

Nombre de centres périphériques ou domiciles concernés: 0

Profil d'action / risque

Le système/dispositif/application concerne-t-il (plusieurs options possibles) :
☐ La consultation / le diagnostic
☐ La surveillance
☐ L'assistance
☐ Une intervention (?)
☑ Autre : monitorisation

Quelle est la spécialité concernée ? Médecine Générale, Cardiologie, Maladies chroniques

Quelle est la population concernée (plusieurs réponses possibles)? :
☐ Toute la population
☐ Les jeunes / enfants
☐ Les adultes
☐ Les personnes âgées
☐ Les personnes handicapées
☐ les personnes atteintes d'une maladie chronique (laquelle:)
☑ Autres: personnes âgées polypathologiques

Le champ d'application du système/dispositif/application:
☐ Interne à un établissement de soins
☑ Entre établissements de soins
☐ Réseau ville-hôpital
☐ HAD, hospitalisation à domicile
☐ Pratique ambulatoire
☐ Autre : _____

2

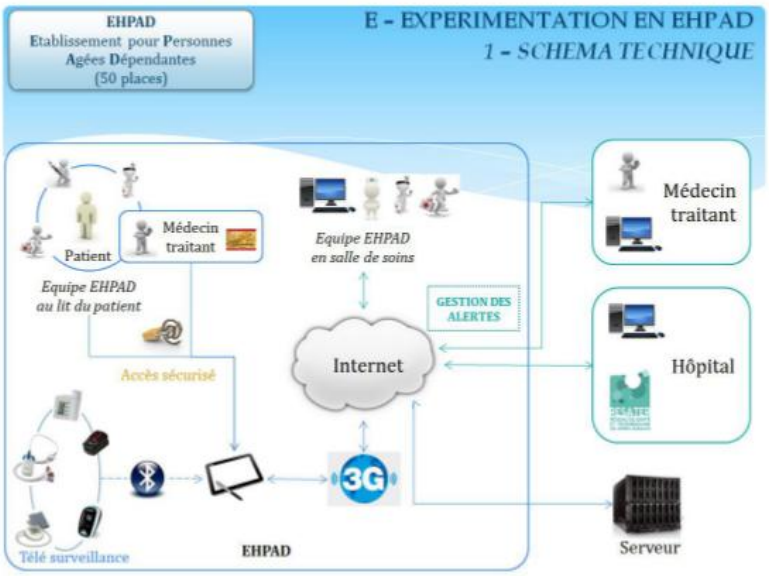
Fiche descriptive GEMSA
V1, Février 2015
e- RESATER SOE3/P1/F682,
Programme INTERREG IV B SUDOE

Nombre de patients concernés (par an / par mois : par semaine):
10 / 40 résidents

Localisation des équipements (principalement)

Où se trouvent les équipements (plusieurs réponses possibles) ?
☐ Sur le patient
☐ Chez le patient
☑ En institution de long séjour (maison de retraite)
☐ Au cabinet du professionnel
☐ Dans une structure de soin
☐ Chez un tiers technologique
☐ autre :_____

Précisez les caractéristiques techniques ou architecturales clés de votre système/dispositif/application (joindre éventuellement un schéma descriptif)
L'objectif est de permettre une régulation fine des urgences, sécuriser le maintien à domicile, adapter les prises en charge, adapter les moyens de transfert, programmer les transports si nécessaire, sécuriser le réseau des spécialistes dans la chaine d'urgence, répondre aux besoins de continuité de soins pour un bassin géographique et pour une population à risque prédéfinie, au besoin de programmer des hospitalisations et de permettre notamment pour les personnes âgées, l'accès à des consultations spécialisées sans déplacement.



3

Fiche descriptive GEMSA
V1, Février 2015
e- RESATER SOE3/P1/F682,
Programme INTERREG IV B SUDOE

Temps

Dans quelle partie du cycle de vie se situe votre système/dispositif/application?
☐ Pré-projet
☑ Projet pilote
☐ Pré-généralisation
☐ Généralisation
☐ Production
☐ Industrialisation

Quel est l'état de maturité de votre système/dispositif/application:
☑ En application
☐ Evaluation
☐ Prototypage
☐ Recherche

Le système/dispositif/application fonctionne-t-il en :
☑ Synchrone
☐ Asynchrone

Le système/dispositif/application est destinée à une activité:
☑ Planifiée
☐ D'urgence

Fréquence d'utilisation du système:
☑ Quotidienne
☐ Hebdomadaire
☐ Mensuelle
☐ Annuelle

Le système/dispositif/application est-il :
☑ Reproductible
☐ De nature isolée

Finalités de l'application

Le système/dispositif/application a pour finalité (plusieurs réponses possibles):
☐ Le bien-être
☐ La prévention
☐ Le traitement des maladies chroniques
☐ Le traitement des maladies aiguës
☐ Les soins palliatifs
☑ Autres : Lien de coordination domicile / HAD, Sécurisation du circuit du médicament, Traçabilité.

Date de début du système/dispositif/application: le 01/07/2014 (1 tablette), le 01/02/2015 (5 tablettes)

[1] https://recherche.telecom-bretagne.eu/gemsa

4

5.4.- Evaluation Form VITLAB

Ficha descriptiva GEMSA
V1, Febrero 2015
e- RESATER SOE3/P1/F682,
Programme INTERREG IV B SUDOE

***Ficha descriptiva de aplicación para evaluación según metodología GEMSA*[1]**

Proyecto e-RESATER. Socio INTRAS

Ficha descriptiva de su sistema / dispositivo / aplicación

Nombre del sistema/dispositivo/aplicación: VITLAB – Virtual Lab for Health and Life
Nombre del promotor del proyecto (de la acción): Consorcio e-RESATER
Institución del promotor del proyecto (de la acción): Fundación INTRAS
Región del promotor del proyecto (de la acción): Castilla y León

¿Cuales son las necesidades en política pública que su sistema/dispositivo/aplicación pretende tratar?

Las regiones en el espacio SUDOE se enfrentan a desafíos territoriales a los que soluciones comprensivas deben ser encontradas, envolviendo la inteligencia social, y los diferentes sectores (publico - administraciones, tejido empresarial, centros de investigación; sector de la prestación de servicios; comunidad).
Algunos de los desequilibrios espaciales en términos económicos y demográficos afectan la cobertura de las necesidades de una población cada vez más envejecida. Esta condición, asociada a las dificultades enfrentadas por el tejido empresarial (limitada capacidad de absorción de conocimiento con la necesidad de aumentar el aprovechamiento de los resultados de IDi), así como la reducción de capacidad de inversión y estructuras de apoyo a la IDi, y la dificultad en mantener e incrementar la calidad de los servicios socio-sanitarios frente a las exigencias actuales y futuras pone en evidencia la necesidad de cambiar de un paradigma "tradicional" de innovación cerrada y tradicionalmente centrado en el sector industrial, hacia un proceso abierto y en continuo cambio. Este paradigma tiene como base el concepto de co-creación y que en gran medida es estimulada por el avance de las TICs y su creciente usabilidad. Las acciones orientadas a estimular y facilitar la Innovación Abierta pretenden abrir las puertas de la innovación para más empresas y personas, al facilitar la conexión y la colaboración para el intercambio de información, conocimiento, y materias primas de la innovación, permitiendo desarrollar e implementar soluciones más realistas y cercanas al mercado.

¿Qué aporta su sistema/dispositivo/aplicación para tratar la problemática precedente?
VITLAB dota el espacio SUDOE de un recurso que pretende estimular la información y participación de la sociedad, según un modelo de participación de cuádruple hélice, en un proceso de *Innovación Metodológica, Innovación Abierta* y *Transferencia de Innovación* usando la inteligencia y expertise colectiva para la co-creación de servicios y tecnologías que den respuesta a algunos de los principales retos socio-demográficos y económicos presentes en las áreas rurales del espacio SUDOE.

El sistema se basa en financiaciones obtenidas de:
X instancias europeas citarlas: UE/Programa INTERREG SUDOE
Importe: 75% SUDOE y 25% INTRAS

☐ instancias locales	citarlas:	Importe:
☐ instancias regionales	citarlas:	Importe:
☐ industria	citarlas:	Importe:
☐ asociaciones	citarlas:	Importe:
☐ otros:	citarlas:	Importe:

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Ficha descriptiva GEMSA
V1, Febrero 2015
e- RESATER SOE3/P1/F682,
Programme INTERREG IV B SUDOE

Actores implicados

¿Quien es el usuario final de la aplicación?:

X el paciente	->	Efectivos involucrados:
X profesional sanitario junto a paciente	->	Efectivos involucrados:
X profesional sanitario a distancia	->	Efectivos involucrados:
X el experto	->	Efectivos involucrados:
X un ayudante	->	Efectivos involucrados:
X otro prestatario de servicios	->	Efectivos involucrados:

Agentes de interés:

- Proveedores de cuidado y organizaciones de atención (del sector social y de salud) Comunidad de investigación
- Profesionales expertos
- Organizaciones del Tercer Sector
- Organizaciones de atención especializada (por ejemplo, grupos de atención del cáncer, la Sociedad de Alzheimer)
- Contactos del Gobierno Local / Gobierno nacional (por ejemplo, departamento social, de salud)
- Alianzas estratégicas locales / asociaciones municipales locales
- Patrocinadores potenciales (ej. los proveedores de tele asistencia)
- Compañías de seguro de salud

¿Cuales son los profesionales de la salud involucrados?:

☐ médico especialista	->	Efectivos involucrados:
☐ médico de Atención Primaria	->	Efectivos involucrados:
☐ enfermera	->	Efectivos involucrados:
☐ auxiliar sanitario	->	Efectivos involucrados:
☐ comadrona	->	Efectivos involucrados:
☐ otros: _____	->	Efectivos involucrados:

¿Cuáles son los profesionales medico-sociales involucrados?:

☐ asistencia vital	->	Efectivos involucrados:
☐ cuidador	->	Efectivos involucrados:
☐ fisioterapeuta	->	Efectivos involucrados:
☐ auxiliar	->	Efectivos involucrados:
☐ auxiliar doméstico	->	Efectivos involucrados:
☐ pedicura	->	Efectivos involucrados:
☐ otros: _____	->	Efectivos involucrados:

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El sistema/dispositivo/aplicación es:
☐ regional
X interregional
☐ nacional
X internacional (la innovación abierta no pretende crear barreras, y por ello esta plataforma se presenta haciendo uso de un idioma común que facilita el intercambio y la cooperación a un nivel internacional)

¿Cual es el centro de referencia?: Fundación INTRAS ofrece el servicio de webmaster/atención al cliente en cuánto a los servicios ofrecidos en la web y por la Red de Conocimiento e-Resater, contando para ello con la colaboración de los socios e-Resater. INTRAS, desde el centro de contacto, gestiona las solicitudes realizadas poniendo en contacto los interesados/usuarios de los servicios VITLAB con las entidades y los expertos de la Red eResater.

Número de centros referencia: _____

Número de centros periféricos o domicilios concernidos: _____

Perfil de acción / riesgo

El sistema/ dispositivo/aplicación concierne (varias opciones posibles):
☐ la consulta / el diagnostico
☐ la vigilancia
☐ la asistencia
☐ una intervención (?)
X otro: Un espacio de Vigilancia tecnológica, observación de oportunidades en e-salud; colaboración e innovación abierta

¿Cual es la especialidad concernida? Estimular y ofrecer un entorno virtual para la cooperación interregional ante la definición e implementación de soluciones e-salud; así como estimular nuevos marcos de referencia regionales que estimulen la IDi y la consciencia del potencial de las TIC en la prestación de servicios sociosanitarios (gestión; prevención; tratamiento; rehabilitación; follow-up).

¿Cual es la población concernida (Varias respuestas posibles)?:
X toda la población
☐ los jóvenes/niños
☐ los adultos
☐ las personas mayores
☐ las personas con discapacidad
☐ las personas que padecen una enfermedad crónica (citarla:)
☐ otros: _____

El ámbito de aplicación del sistema/dispositivo/aplicación:
☐ interno en un establecimiento de atención sanitaria
☐ entre establecimientos de atención sanitaria
☐ red ciudad/hospital
☐ HAD, hospitalización a domicilio
☐ práctica ambulatoria
☐ otro: Residencia de ancianos /

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Número de pacientes afectados (al año/al mes/semanalmente):
_____

Localización de los equipamientos (mayoritariamente)

¿Donde se encuentran los equipamientos?
☐ el paciente los lleva encima
☐ en el domicilio del paciente
☐ en institución para larga estancia
☐ en la consulta del profesional
☐ en una estructura de cuidados
☐ en un tercero tecnológico
☐ otro: _____

Precise las características técnicas o arquitectónicas clave de su programa/dispositivo/aplicación (adjuntar eventualmente un esquema descriptivo):

VITLAB es una página y servicio web, una herramienta abierta y evolutiva de acompañamiento metodológico que pretende fomentar la recopilación de prácticas, proporcionar un entorno colaborativo, presentar guías metodológicas, promover un servicio de innovación abierto y el *matching* entre oferta y demanda.
Para proseguir los objetivos y metodología definidos (e.Resater framework), la web e-Resater se estructura en dos áreas de acceso (Público y Privado), y en 4 pilares de ejecución: Home; Knowledge; Showroom; VITLAB. Los tres primeros pilares son de carácter eminentemente público. La pestaña VITLAB congregar los recursos privados facilitadores de herramientas colaborativas en las que se hace necesaria la protección de datos, asegurando la confidencialidad de los procesos de cooperación y co-desarrollo entre miembros en un entorno flexible y adaptable. VITLAB se encuentra accesible a través del URL http://www.vitlab-resater.eu/

ACCESO PÚBLICO
- Home
- Knowledge (Áreas de Interés ; Observatorio)
- Showroom (Catalogo Digital)

ACCESO PRIVADO
- Vitlab

OTROS APARTADOS
- Servicios
- Blog
- Calendario
- Contactos
- Fórum
- Noticias
- Búsqueda Avanzada
- FAQ's
- Galerías (videos e imágenes)
- Cruce Oferta & Demanda

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Ficha descriptiva GEMSA
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Tiempo

¿En qué momento del ciclo de vida se encuentra su sistema/dispositivo/aplicación?
☐ pre-proyecto
☐ proyecto piloto
☐ pre-generalización
X generalización
☐ industrialización

¿Cual es el estado de madurez de su sistema/dispositivo/aplicación?:
X fase de aplicación
☐ en fase evaluación
☐ en fase de prototipado
☐ investigación

El sistema/dispositivo/aplicación funciona en:
X sincronía
☐ asincronía

El sistema/dispositivo/aplicación está destinado a una actividad:
X planificada
☐ de urgencia

Frecuencia de uso del sistema:
☐ diaria
☐ semanal
☐ mensual
☐ anual

El sistema/dispositivo/aplicación es:
☐ reproductible
☐ puntual

Finalidades de la aplicación

La plataforma abierta VITLAB funciona como una **ventanilla única,** a través de la cual la red de innovación e-Resater tiene acceso a los servicios de valor añadido. Ofrece un espacio para la co-creación de innovación junto con las comunidades, permitiendo seguir el ritmo de los usuarios, incrementar la demanda de productos complementarios, reducir costes, desarrollar tecnologías y servicios más adecuados a las necesidades de los mercados a los que están orientados.

Fecha del comienzo del sistema/dispositivo/aplicación: VITLAB se encuentra accesible en un entorno web desde 2013, contando con un servicio de apoyo técnico (análisis y solución de incidencias; consideración de potenciales mejoras para ajuste continuo de la estratégica y soporte/servicios prestados).

[1] https://recherche.telecom-bretagne.eu/gemsa

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5.5.- Evaluation Form Health Observatory

Ficha descriptiva GEMSA
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Programme INTERREG IV B SUDOE

Ficha descriptiva de aplicación para evaluación según metodología GEMSA[1]

Proyecto e-RESATER. Socio FACC (Federación Asturiana de Concejos)

Ficha descriptiva de su sistema / dispositivo / aplicación

Nombre del sistema/dispositivo/aplicación:
Coordinación sociosanitaria – Observatorio de la Salud- OMI-AP
Nombre del promotor del proyecto:
Federación Asturiana de Concejos y Consejería de Sanidad del Principado de Asturias
Institución del promotor del proyecto: Gobierno del Principado de Asturias
Región del promotor del proyecto: Principado de Asturias (Área Sanitaria II)

¿Cuales son las necesidades en política pública que su sistema/dispositivo/aplicación pretende tratar?
Coordinación Socio Sanitaria para conseguir una óptima utilización de los recursos presentes en el territorio y con la participación de todos los entes implicados (sanitarios, técnicos locales, ciudadanía, asociaciones, profesionales....)

¿Qué aporta su sistema/dispositivo/aplicación para tratar la problemática precedente?
Una herramienta para la coordinación efectiva entre el ámbito local y el sanitario. Por un lado, los médicos y demás personal de atención primaria tienen acceso directo desde el OMI-AP a las actividades comunitarias de su territorio para recomendar o prescribir ejercicio físico o actividades de ocio a sus pacientes. Por otro lado, con la aplicación móvil, toda la ciudadanía tendrá acceso a las actividades de promoción de la salud puestas en marcha por las distintas entidades que actúan en el territorio (ayuntamiento, asociaciones, ciudadanía en general....).

El sistema se basa en financiaciones obtenidas de:
X instancias europeas citarlas: Interreg SUDOE Importe: 9.690€
coste directo de la aplicación (habría que añadir el personal imputado al proyecto)
X instancias locales citarlas: Federación Asturiana de Concejos Importe:
3.300 € coste directo de la aplicación (habría que añadir el personal imputado al proyecto)
X instancias regionales citarlas: Consejería de Sanidad Importe: (personal adscrito al proyecto)
☐ industria citarlas: Importe:
☐ asociaciones citarlas: Importe:
☐ otros: citarlas: Importe:

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Actores implicados

¿Quien es el usuario final de la aplicación?:
☐ el paciente -> Efectivos involucrados:
X profesional sanitario junto a paciente -> Efectivos involucrados: personal sanitario de Atención Primaria + población con patologías crónicas (cardiovascular, colesterol, depresión...)
☐ profesional sanitario a distancia -> Efectivos involucrados:
☐ el experto -> Efectivos involucrados:
☐ un ayudante -> Efectivos involucrados:
X otro prestatario de servicios - > Efectivos involucrados:
(técnicos municipales, asociaciones, ciudadanía, profesionales...)

¿Cuales son los profesionales de la salud involucrados?:
☐ médico especialista -> Efectivos involucrados:
X médico de Atención Primaria -> Efectivos involucrados: Centro de Salud Tineo
X enfermera -> Efectivos involucrados: Centro de Salud Tineo
X auxiliar sanitario -> Efectivos involucrados: Centro de Salud Tineo
☐ comadrona -> Efectivos involucrados:
☐ otros: _____ -> Efectivos involucrados:

¿Cuáles son los profesionales medico-sociales involucrados?:
☐ asistencia vital -> Efectivos involucrados:
☐ cuidador -> Efectivos involucrados:
☐ fisioterapeuta -> Efectivos involucrados:
☐ auxiliar -> Efectivos involucrados:
☐ auxiliar doméstico -> Efectivos involucrados:
☐ pedicura -> Efectivos involucrados:
X otros: _____ -> Efectivos involucrados: técnicos locales, asociaciones, ciudadanía....

El sistema/dispositivo/aplicación es:
X regional
☐ interregional
☐ nacional
☐ internacional

¿Cual es el centro de referencia?: Centro de Salud de Tineo

Número de centros referencia: 1 Centro de Salud (Tineo)

Número de centros periféricos o domicilios concernidos: : 6 consultorios periféricos (Navelgas, Bárcena del Monasterio, Gera, Tuña, Soto de la Barca y Riocastiello)

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Actores implicados

¿Quien es el usuario final de la aplicación?:
☐ el paciente -> Efectivos involucrados:
X profesional sanitario junto a paciente -> Efectivos involucrados: personal sanitario de Atención Primaria + población con patologías crónicas (cardiovascular, colesterol, depresión...)
☐ profesional sanitario a distancia -> Efectivos involucrados:
☐ el experto -> Efectivos involucrados:
☐ un ayudante -> Efectivos involucrados:
X otro prestatario de servicios - > Efectivos involucrados:
(técnicos municipales, asociaciones, ciudadanía, profesionales...)

¿Cuales son los profesionales de la salud involucrados?:
☐ médico especialista -> Efectivos involucrados:
X médico de Atención Primaria -> Efectivos involucrados: Centro de Salud Tineo
X enfermera -> Efectivos involucrados: Centro de Salud Tineo
X auxiliar sanitario -> Efectivos involucrados: Centro de Salud Tineo
☐ comadrona -> Efectivos involucrados:
☐ otros: _____ -> Efectivos involucrados:

¿Cuáles son los profesionales medico-sociales involucrados?:
☐ asistencia vital -> Efectivos involucrados:
☐ cuidador -> Efectivos involucrados:
☐ fisioterapeuta -> Efectivos involucrados:
☐ auxiliar -> Efectivos involucrados:
☐ auxiliar doméstico -> Efectivos involucrados:
☐ pedicura -> Efectivos involucrados:
X otros: _____ -> Efectivos involucrados: técnicos locales, asociaciones, ciudadanía....

El sistema/dispositivo/aplicación es:
X regional
☐ interregional
☐ nacional
☐ internacional

¿Cual es el centro de referencia?: Centro de Salud de Tineo

Número de centros referencia: 1 Centro de Salud (Tineo)

Número de centros periféricos o domicilios concernidos: : 6 consultorios periféricos (Navelgas, Bárcena del Monasterio, Gera, Tuña, Soto de la Barca y Riocastiello)

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Ficha descriptiva GEMSA
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Perfil de acción / riesgo

El sistema/ dispositivo/aplicación concierne (varias opciones posibles):
X la consulta / el diagnostico
☐ la vigilancia
☐ la asistencia
X una intervención (?)
☐ otro:

¿Cual es la especialidad concernida? Recomendación de actividad física para enfermos crónicos (depresión, cardiovascular, ansiedad, colesterol, hipertensión....)

¿Cual es la población concernida (Varias respuestas posibles)?:
☐ toda la población
☐ los jóvenes/niños
☐ los adultos
☐ las personas mayores
☐ las personas con discapacidad
X las personas que padecen una enfermedad crónica (citarla:): depresión, riesgo cardiovascular, ansiedad, colesterol, hipertensión....)
☐ otros: _____

El ámbito de aplicación del sistema/dispositivo/aplicación:
X interno en un establecimiento de atención sanitaria (en Aplicación OMI-AP)
☐ entre establecimientos de atención sanitaria
☐ red ciudad/hospital
☐ HAD, hospitalización a domicilio
☐ práctica ambulatoria
X otro: Aplicación móvil

Número de pacientes afectados (al año/al mes/semanalmente):
Población con cronicidad que acuda a consulta de atención primaria

Localización de los equipamientos (mayoritariamente)

¿Donde se encuentran los equipamientos?
X el paciente los lleva encima (móvil)
☐ en el domicilio del paciente
☐ en institución para larga estancia
X en la consulta del profesional (aplicación OMI-AP)
☐ en una estructura de cuidados
☐ en un tercero tecnológico
☐ otro: _____

3

Ficha descriptiva GEMSA
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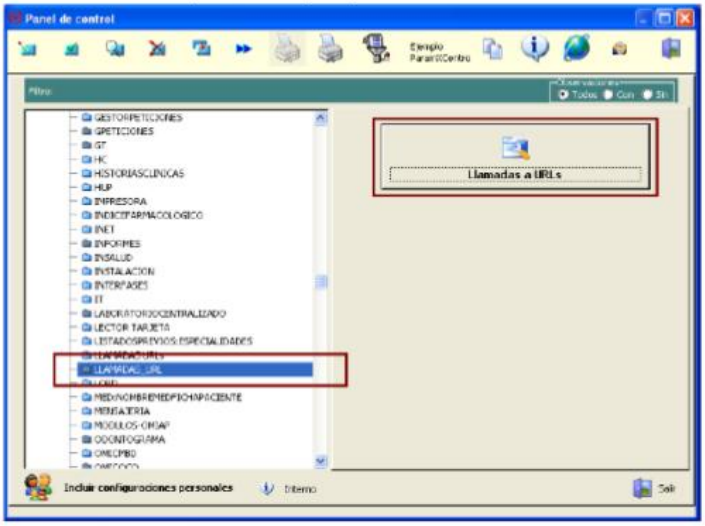
Precise las características técnicas o arquitectónicas clave de su programa/dispositivo/aplicación (adjuntar eventualmente un esquema descriptivo):



Mejora de la Base de Datos de recogida de actividades Comunitarias Asturias Actúa en Observatorio de la Salud
Implementación de una aplicación para móvil con acceso a Asturias Actúa.
Tapiz Historia Clínica. Llamada a la Web de actividades Comunitarias Asturias Actua desde el OMIap.

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Ficha descriptiva GEMSA
V1, Febrero 2015
e- RESATER SOE3/P1/F682,
Programme INTERREG IV B SUDOE

Tiempo

¿En qué momento del ciclo de vida se encuentra su sistema/dispositivo/aplicación?
☐ pre-proyecto
X proyecto piloto
☐ pre-generalización
☐ generalización
☐ industrialización

¿Cual es el estado de madurez de su sistema/dispositivo/aplicación?:
☐ fase de aplicación
☐ en fase evaluación
X en fase de prototipado
☐ investigación

El sistema/dispositivo/aplicación funciona en:
☐ sincronía
☐ asincronía

El sistema/dispositivo/aplicación está destinado a una actividad:
X planificada
☐ de urgencia

Frecuencia de uso del sistema:
X diaria
☐ semanal
☐ mensual
☐ anual

El sistema/dispositivo/aplicación es:
X reproductible
☐ puntual

Finalidades de la aplicación

El sistema/dispositivo/aplicación tiene como finalidad (varias respuestas posibles):
X el bienestar
X la prevención
X el tratamiento de las enfermedades crónicas
☐ el tratamiento de las enfermedades agudas
☐ los cuidados paliativos
☐ otros: _____

Fecha del comienzo del sistema/dispositivo/aplicación: 20/02/2015

[1] https://recherche.telecom-bretagne.eu/gemsa

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5.6.- Evaluation Form Shared Health and Social Record

Fiche descriptive GEMSA
V1, Juin 2015
e- RESATER SOE3/P1/F682,
Programme INTERREG IV B SUDOE

GEMSA: Fiche descriptive de son système/dispositif/application

Nom du système/dispositif/application : Dossier Médico-social partagé pluri professionnel du Couserans

Nom du porteur : **Syndicat Mixte du Pays Couserans**
Institution du porteur : **Fonction publique territoriale**
Région du porteur : **Couserans, Ariège, France**

Quelles sont les besoins de politique publique visés par votre système/dispositif/application ?
Réduire le nombre de ruptures dans le parcours de la personne et faciliter l'échange d'informations. dans un bassin de santé rural et montagneux.

Quel est l'apport de votre système/dispositif/application par rapport à la problématique précédente ?
Identifier les informations dont chacun a besoin et les moyens d'échanges interprofessionnels du patient.

Le système/dispositif/application est-il basé sur des financements obtenus auprès :

☑ Instances européennes	lesquelles : INTERRREG IV B SUDOE	Montant :
☐ Instances nationales	lesquelles :	Montant :
☐ Instances locales	lesquelles :	Montant :
☐ Industrie	lesquelles :	Montant :
☐ Associations	lesquelles :	Montant :
☐ Autre	lesquelles :	Montant :

Acteurs impliqués

Qui est l'utilisateur final de l'application:

☐ le patient	-> Effectifs concernés :en T0 : __Tfin : ____
☑ le professionnel de santé au chevet du patient	-> Effectifs concernés :en T0 : __Tfin : ____
☑ le professionnel de santé à distance	-> Effectifs concernés :en T0 : __Tfin : ____
☐ l'expert	-> Effectifs concernés :en T0 : __Tfin : ____
☐ un aidant	-> Effectifs concernés :en T0 : __Tfin : ____
☑ un autre prestataire de services : Aides à la personne	-> Effectifs concernés :en T0 : __Tfin : ____

Quels sont les professionnels de santé concernés (plusieurs réponses possibles):

☑ médecin hospitalier	-> Effectifs concernés :en T0 : __Tfin : ____
☑ médecin libéral	-> Effectifs concernés :en T0 : __Tfin : ____
☑ infirmier(ère)	-> Effectifs concernés :en T0 : __Tfin : ____
☑ auxiliaire de santé	-> Effectifs concernés :en T0 : __Tfin : ____
☐ sage femmes	-> Effectifs concernés :en T0 : __Tfin : ____
☑ autres: HAD	-> Effectifs concernés :en T0 : __Tfin : ____

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Quels sont les professionnels médico-sociaux concernés (plusieurs réponses possibles):

☑ assistance de vie	-> Effectifs concernés :en T0 : __Tfin : ____
☐ garde malade	-> Effectifs concernés :en T0 : __Tfin : ____
☑ kinésithérapeute	-> Effectifs concernés :en T0 : __Tfin : ____
☑ aide-soignante	-> Effectifs concernés :en T0 : __Tfin : ____
☑ aide-ménagère	-> Effectifs concernés :en T0 : __Tfin : ____
☐ pédicure	-> Effectifs concernés :en T0 : __Tfin : ____
☑ autres: Services sociaux	-> Effectifs concernés :en T0 : __Tfin : ____

Le système/dispositif/application est-il :
☑ Régional (local)
☐ Interrégional
☐ National
☐ International

Qui est le centre de référence: ECHOSANTE MAIA

Nombre de centres référents: 1

Nombre de centres périphériques ou domiciles concernés: 5 dossiers patients suivi en gestion de cas.

Profil d'action / risque

Le système/dispositif/application concerne-t-il (plusieurs options possibles) :
☑ La consultation / le diagnostic
☑ La surveillance
☑ L'assistance
☐ Une intervention (?)
☑ Autre: la coordination

Quelle est la spécialité concernée ? Médecine générale, Maladies chroniques évolutives

Quelle est la population concernée (plusieurs réponses possibles)? :
☐ Toute la population
☐ Les jeunes / enfants
☐ Les adultes
☑ Les personnes âgées
☑ Les personnes handicapées
☐ les personnes atteintes d'une maladie chronique (laquelle:)
☑ Autres: Personnes atteintes de maladies aigües ou chroniques évolutives et/ou instables

Le champ d'application du système/dispositif/application:
☐ Interne à un établissement de soins
☐ Entre établissements de soins
☑ Réseau ville-hôpital
☐ HAD, hospitalisation à domicile
☐ Pratique ambulatoire

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Fiche descriptive GEMSA
V1, Juin 2015
e- RESATER SOE3/P1/F682,
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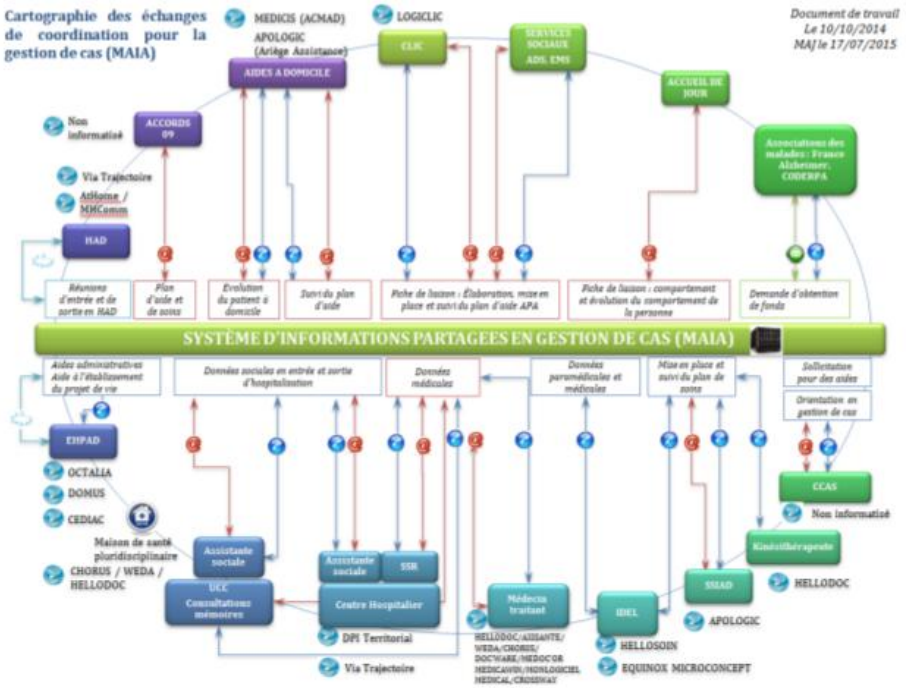
☐ Autre : _____

Nombre de patients concernés (par an / par mois : par semaine):
Environ 50 patients par an.

Localisation des équipements (principalement)

Où se trouvent les équipements (plusieurs réponses possibles) ?
☐ Sur le patient
☐ Chez le patient
☐ En institution de long séjour
☑ Au cabinet du professionnel
☑ Dans une structure de soin
☐ Chez un tiers technologique
☑ Autre : **Chez les prestataires de services d'aide à domicile et les services sociaux**

Précisez les caractéristiques techniques ou architecturales clés de votre système/dispositif/application (joindre éventuellement un schéma descriptif)



3

Fiche descriptive GEMSA
V1, Juin 2015
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Temps

Dans quelle partie du cycle de vie se situe votre système/dispositif/application?
☐ Pré-projet
☑ Projet pilote
☐ Pré-généralisation
☐ Généralisation
☐ Production
☐ Industrialisation

Quel est l'état de maturité de votre système/dispositif/application:
☐ En application
☐ Evaluation
☑ Prototypage
☐ Recherche

Le système/dispositif/application fonctionne-t-il en :
☑ Synchrone
☐ Asynchrone

Le système/dispositif/application est destinée à une activité:
☑ Planifiée
☐ D'urgence

Fréquence d'utilisation du système:
☑ Quotidienne
☐ Hebdomadaire
☐ Mensuelle
☐ Annuelle

Le système/dispositif/application est-il :
☑ Reproductible
☐ De nature isolée

Finalités de l'application

Le système/dispositif/application a pour finalité (plusieurs réponses possibles):
☐ Le bien-être
☐ La prévention
☐ Le traitement des maladies chroniques
☐ Le traitement des maladies aiguës
☐ Les soins palliatifs
☑ Autres : **Lien de coordination.**

Date de début du système/dispositif/application: **Début des groupes de travail : Août 2014**

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6.- Annex II. Questionnaires and Forms

Cuestionarios de Evaluación de Satisfacción de usuarios
PROYECTO e- RESATER SOE3/P1/F682

Cuestionario de satisfacción general del proyecto e-RESATER

Intrucciones de uso

Estimado Sr. Sra:
Este cuestionario mide su grado de satisfacción o desagrado con el equipamiento que ha recibido en el proyecto e-RESATER.
El objetivo es conocer si el equipo ha funcionado correctamente para Usted y encontrar posibles mejoras.Sus respuestas serán evaluadas y muy valoradas.

Information general		
Nombre encuestado:		a
Fecha:		b
Ocupación:		c
Organización:		d
Dirección/Ciudad/País:		e

Rol en el proyecto e-RESATER (marque con una X)		
Enfermera		b
Médico		c
Auxiliar/Gerocultor		d
Otros		f
Especifique:		g

He usado el siguiente equipamiento:		2
Por favor, anote el equipamiento que ha utilizado durante la duración del proyecto (por favor, marque su respuesta con una x):		
Tensiómetro		a
Pulsioxiométro		b
Glucométro		c
Electrocardiograma de 12 derivaciones Card Guard 12-lead SelfCheck ECG (ECG Monitor)		d
Tableta		e
Portal de telemonitorizacion		f
Termómetro Timpánico		g
Otros		h

Picture 25: User satisfaction questionnaire.Introduction

Cuestionarios de Evaluación de Satisfacción de usuarios
PROYECTO e- RESATER SOE3/P1/F682

Los dispositivos
Facilidad de uso, aceptación and satisfacción!

Las siguientes preguntas están relacionadas con los dispositivos que ha utilizado como parte del proyecto e-RESATER. El objetivo de esta parte consiste en medir su nivel de satisfacción o desagrado con el equipo y comprobar el grado de fácil manejo del mismo.

En el siguiente apartado, por favor, marque su opinión con una X. Las cinco categorías son: 1
1. Nada
2. Muy poco
3. Neutro
4. Mucho
5. Totalmente

	1	2	3	4	5	
Grado de satisfacción con el equipamiento						a
Grado de satisfacción con la formación recibida						b
Grado de satisfacción con el manual recibido						c
Grado de satisfacción con el soporte						d
Comentarios:						e

A continuación, por favor, señale su grado de satisfacción con respecto a las siguientes declaraciones. Por favor, marque su opinión con una X. Las 5 categoría son las siguientes: 2
1. Totalmente en desacuerdo
2. En desacuerdo
3. Indiferente o neutro
4. De acuerdo
5. Totalmente de acuerdo

	1	2	3	4	5	
El equipo es fácil de usar						a
Creo que el equipo ha mejorado mi trabajo						b
El equipo ha mejorado mi capacidad para ayudar a las personas						c
El equipo es fácil de mantener						d
Voy a echar de menos el equipo cuando el proyecto se acabe						f
El equipo me ha proporcionado un mayor sentimiento de seguridad						j
El equipamiento es fácil de usar						j
Comentarios:						m

¿Cuántas veces ha utilizado el equipo? (marque con una X)		3
1. Diariamente		a
2. Semanalmente		b
3. Más de una vez al mes		c
4. Menos de una vez al mes		d

¿El equipo ha mejorado la satisfacción de su trabajo? (marque con una X)		4
SÍ		a
No		b
Por favor, especifique:		c

¿Ha tenido algún problema con el equipo? Por ej, mal funcionamiento de los dispositivos (marque		5
SÍ		a
No		b
Por favor, especifique:		c

¿El equipo que le ha sido entregado ha causado problemas de comunicaciones? p. ej. interferencias con otros aparatos o problemas de cobertura (marque con una X)		6
SÍ		a
No		b
Por favor, especifique:		c

¿El servicio ha supuesto problemas de aceptación por parte de otras personas del entorno? (marque con una X)		7
SÍ		a
No		b
Por favor, especifique:		c

¿Considera que el servicio es una herramienta útil? (marque con una X)		8
SÍ		a
No		b
Por favor, especifique:		c

¿El servicio ha causado alguna situación peligrosa? (marque con una X)		9
SÍ		a
No		b
Por favor, especifique:		c

¿El servicio le ha supuesto algun problema ético? (marque con una X)		10
SÍ		a
No		b
Por favor, especifique:		c

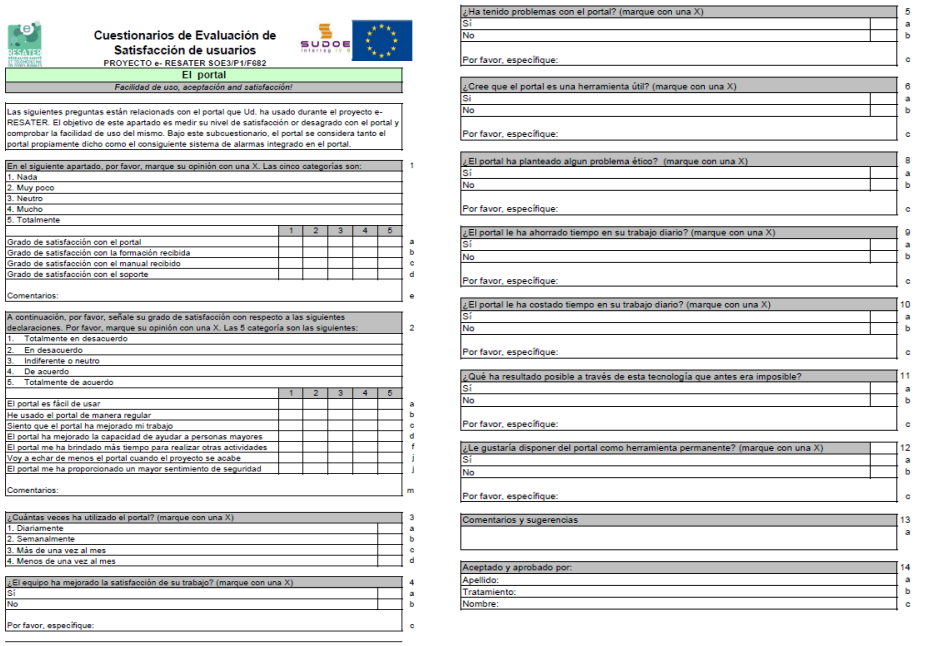
¿El servicio le ha ahorrado tiempo en su trabajo diario? (marque con una X)		11
SÍ		a
No		b
Por favor, especifique:		c

¿El servicio le ha costado tiempo en su trabajo diario? (marque con una X)		12
SÍ		a
No		b
Por favor, especifique:		c

¿Qué mejoras cree que aporta el servicio con respecto a antes?		14
Por favor, especifique:		c

¿Le gustaría disponer del equipamiento permanente? (marque con una X)?		15
SÍ		a
No		b
¿Porqué? / ¿Porqué no?		c

Picture 26: User satisfaction questionnaire. Use of devices



Cuestionarios de Evaluación de Satisfacción de usuarios
PROYECTO e- RESATER SOE3/P1/F682

El portal
Facilidad de uso, aceptación and satisfacción!

Las siguientes preguntas están relacionads con el portal que Ud. ha usado durante el proyecto e-RESATER. El objetivo de este apartado es medir su nivel de satisfacción o desagrado con el portal y comprobar la facilidad de uso del mismo. Bajo este subcuestionario, el portal se considera tanto el portal propiamente dicho como el consiguiente sistema de alarmas integrado en el portal.

En el siguiente apartado, por favor, marque su opinión con una X. Las cinco categorías son:						
1. Nada						
2. Muy poco						
3. Neutro						
4. Mucho						
5. Totalmente						
	1	2	3	4	5	
Grado de satisfacción con el portal						a
Grado de satisfacción con la formación recibida						b
Grado de satisfacción con el manual recibido						c
Grado de satisfacción con el soporte						d
Comentarios:						e

A continuación, por favor, señale su grado de satisfacción con respecto a las siguientes declaraciones. Por favor, marque su opinión con una X. Las 5 categoría son las siguientes:						
1. Totalmente en desacuerdo						
2. En desacuerdo						
3. Indiferente o neutro						
4. De acuerdo						
5. Totalmente de acuerdo						
	1	2	3	4	5	
El portal es fácil de usar						a
He usado el portal de manera regular						b
Siento que el portal ha mejorado mi trabajo						c
El portal ha mejorado la capacidad de ayudar a personas mayores						d
El portal me ha brindado más tiempo para realizar otras actividades						f
Voy a echar de menos el portal cuando el proyecto se acabe						j
El portal me ha proporcionado un mayor sentimiento de seguridad						j
Comentarios:						m

¿Cuántas veces ha utilizado el portal? (marque con una X)		
1. Diariamente		a
2. Semanalmente		b
3. Más de una vez al mes		c
4. Menos de una vez al mes		d

¿El equipo ha mejorado la satisfacción de su trabajo? (marque con una X)		
Sí		a
No		b
Por favor, especifique:		c

¿Ha tenido problemas con el portal? (marque con una X)		
Sí		a
No		b
Por favor, especifique:		c

¿Cree que el portal es una herramienta útil? (marque con una X)		
Sí		a
No		b
Por favor, especifique:		c

¿El portal ha planteado algun problema ético? (marque con una X)		
Sí		a
No		b
Por favor, especifique:		c

¿El portal le ha ahorrado tiempo en su trabajo diario? (marque con una X)		
Sí		a
No		b
Por favor, especifique:		c

¿El portal le ha costado tiempo en su trabajo diario? (marque con una X)		
Sí		a
No		b
Por favor, especifique:		c

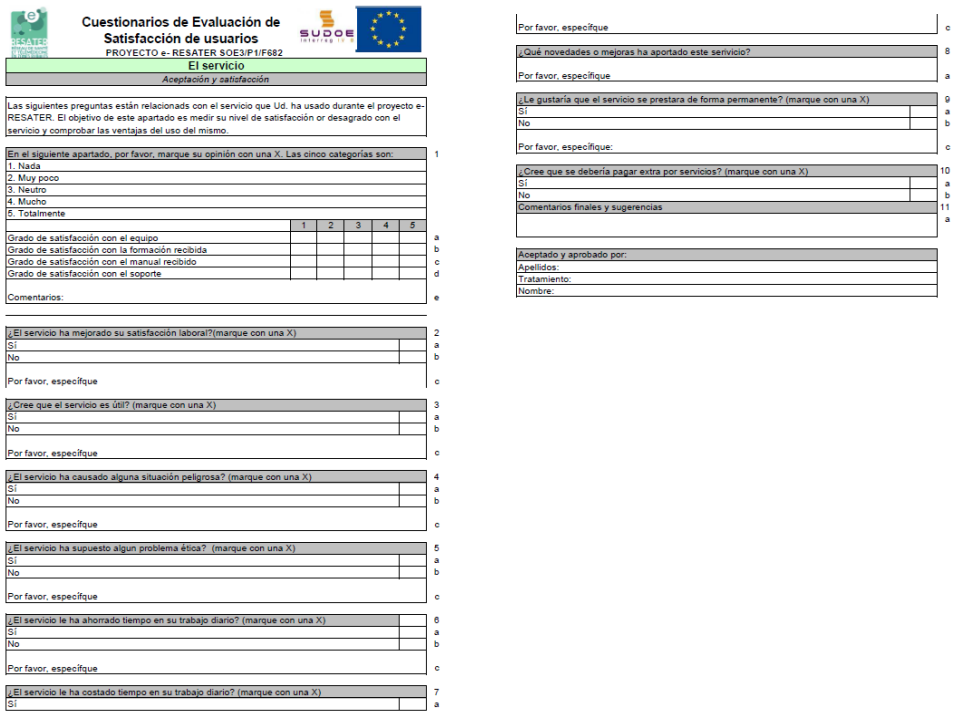
¿Qué ha resultado posible a través de esta tecnología que antes era imposible?		
Sí		a
No		b
Por favor, especifique:		c

¿Le gustaría disponer del portal como herramienta permanente? (marque con una X)		
Sí		a
No		b
Por favor, especifique:		c

Comentarios y sugerencias	
	a

Aceptado y aprobado por:	
Apellido:	a
Tratamiento:	b
Nombre:	c

Picture 27: User satisfaction questionnaire. Use of the telemonitoring portal



Cuestionarios de Evaluación de Satisfacción de usuarios
PROYECTO e- RESATER SOE3/P1/F682

El servicio
Aceptación y satisfacción

Las siguientes preguntas están relacionads con el servicio que Ud. ha usado durante el proyecto e-RESATER. El objetivo de este apartado es medir su nivel de satisfacción or desagrado con el servicio y comprobar las ventajas del uso del mismo.

En el siguiente apartado, por favor, marque su opinión con una X. Las cinco categorías son:						
1. Nada						
2. Muy poco						
3. Neutro						
4. Mucho						
5. Totalmente						
	1	2	3	4	5	
Grado de satisfacción con el equipo						a
Grado de satisfacción con la formación recibida						b
Grado de satisfacción con el manual recibido						c
Grado de satisfacción con el soporte						d
Comentarios:						e

¿El servicio ha mejorado su satisfacción laboral?(marque con una X)		
Sí		a
No		b
Por favor, especifque		c

¿Cree que el servicio es útil? (marque con una X)		
Sí		a
No		b
Por favor, especifque		c

¿El servicio ha causado alguna situación peligrosa? (marque con una X)		
Sí		a
No		b
Por favor, especifque		c

¿El servicio ha supuesto algun problema ética? (marque con una X)		
Sí		a
No		b
Por favor, especifque		c

¿El servicio le ha ahorrado tiempo en su trabajo diario? (marque con una X)		
Sí		a
No		b
Por favor, especifque		c

¿El servicio le ha costado tiempo en su trabajo diario? (marque con una X)		
Sí		a

Por favor, especifque	c

¿Qué novedades o mejoras ha aportado este servicio?	
Por favor, especifque	a

¿Le gustaría que el servicio se prestara de forma permanente? (marque con una X)		
Sí		a
No		b
Por favor, especifque:		c

¿Cree que se debería pagar extra por servicios? (marque con una X)		
Sí		a
No		b
Comentarios finales y sugerencias		
		a

Aceptado y aprobado por:
Apellidos:
Tratamiento:
Nombre:

Picture 28: User satisfaction questionnaire. Use of the telemonitoring portal

7.- Acknowledgements

The e-RESATER consortium would like to thank the experts committee their collaboration in the activities of the project, and their interest in all the initiatives presented.

The Aragón team would like to thank the personnel and the responsible people from the Elderly Homes from Albelda (La Sabina), Campo (Valle de Ésera) and Binéfar (Comarcal) their interest in the activity and the work they have performed in order to evaluate the service.

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