

## COMPILING THE STATE OF THE ART IN E-HEALTH IN THE PARTNER COUNTRIES

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## 1. DESCRIPTION OF THE TASKS

The description of the task about this initial phase is reflected in the final version of the INTENCIVE proposal in three different places as follows:

### 1. 1. Project approach:

PHASE 1-Step 1: “1. Baseline establishment on eHealth (compilation of the relevant research, reports, project results, etc.) lead by P6. The idea is not to engage in new research but draft a report on the state of the art in the partner countries in connection to eHealth and customer orientation.

### 1. 2. Project management:

P6 is in charge of compiling the state of the art in eHealth in the partner countries and publishing of the e-report in English.

#### - **Part D. Work Plan. D.1 PHASE 1 Interregional learning. Semester 1. Exchange of experience:**

P6 will compile e-publication of the state of the art in e-health in the partner countries based on the existing research, statistics, strategies and policy documents relevant to the approach of the project. Emphasis will be on the regional perspective, but also national insight will be needed as the wider background. All project partners (PPs) assist as advised with collecting the material and translating it as needed.

## 2. METHODOLOGY

Accordingly, to the the kickoff meeting P6 presentation IDIVAL will compile essential information about e-health documents of participant countries. This will be obtained by:

- Search in the main engine database of references and abstracts on life sciences Web of science (WOS search includes databases: WOS, CCC, DIIDW, KJD, MEDLINE, RSCI, SCIELO)
- Search in the main repositories of European projects.
- Use of the main e-Health statistics, and references documents as:
  - Atlas of Health country profiles 2015 (WHO)
  - Health at glance 2018. OECD
  - Annual review e-health survey (HIMMS)
- Survey to the participants. The survey will ask for relevant documents obtained from the participants' countries and will prioritize the documents obtained in the search by country.
- We have done several probes with different search terms (e-health, telemedicine, elderly and telemedicine) in an iterative back and force search in WOS, and based in the findings we consider that e-health is restrictive but specific in order to identify documents related directly to ehealth and much better for avoiding false positive data.

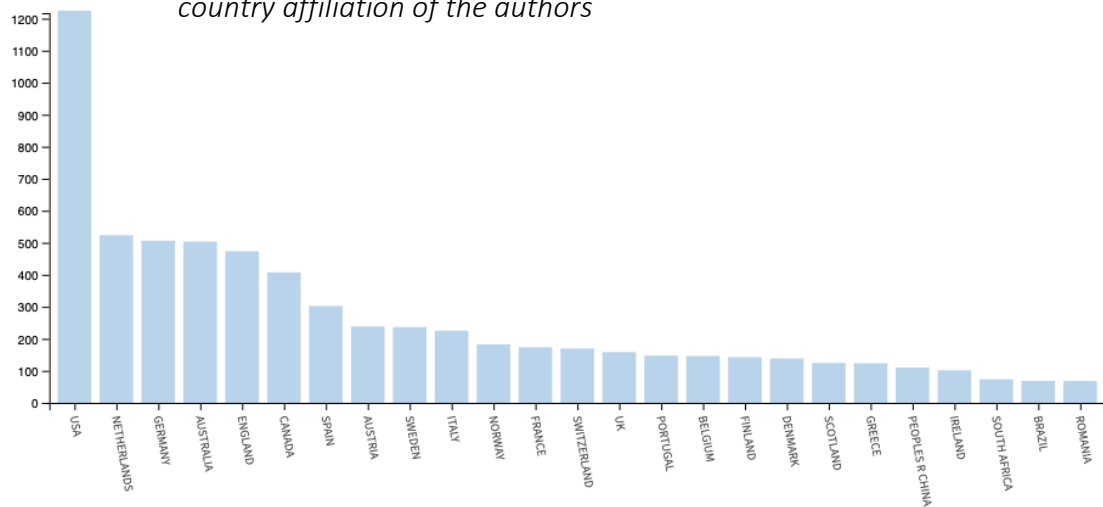
All the information will be gathered and compiled in a document that will include a general description by country, the list of the documents and the list of the documents as appendix.

Main documents will also be gathered to generate an Intencive repository.

### 3. PUBLICATIONS OVERVIEW

In a first overview of all the published documents recovered by a search in WOS with the “e-Health” tag a total of 5827 documents were retrieved.

**Graph 1.** *Number of documents with e-health topic ordered by the country affiliation of the authors*



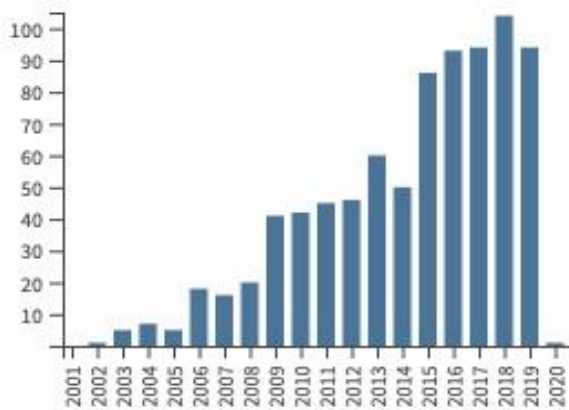
## 4. OVERALL INTENCIVE COUNTRY PUBLICATIONS

### 4.1. Analysis by country and institution

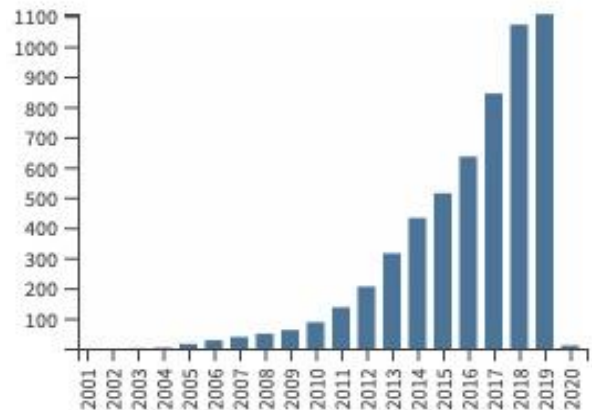
A search for documents in WOS published focused on e-Health with the tags TOPIC: (e-Health) AND ADDRESS: (France OR Hungary OR Finland OR Spain OR Malta) has yield 831 documents.

The number of publications by year and the sum of publications are reflected in the graphs. Both indicate a clear increase year by year since the first publications in 2002.

Graph 2. Total Publications by Year



Graph 3. Sum of Times Cited by Year



The number of publications per country are reflected in the table 1.

**Table 1.** Number of publications in e-Health with authors of Intencive countries.

Country	Number of publications
Spain	405
France	312
Finland	90
Hungary	24
Malt	0

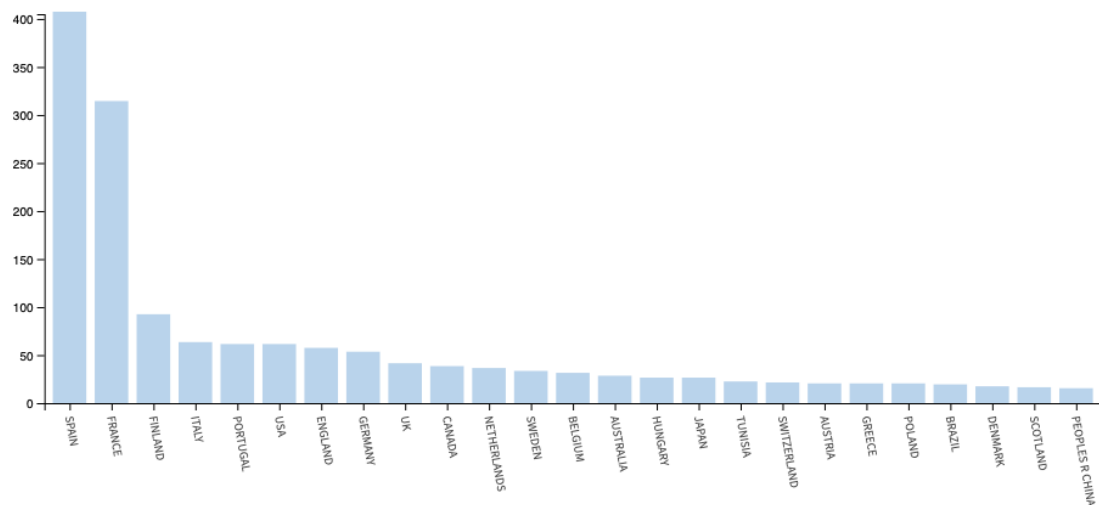
Top 20 institutions included in the affiliation of these publications are reflected in the table ordered by the number of country affiliated documents.

Institutions	Record Count	Country
Centre National De La Recherche Scientifique Cnrs	54	France
Institut National De La Sante Et De La Recherche Medicale Inserm	48	France
Universidad Politecnica De Madrid	46	Spain
Assistance Publique Hopitaux Paris Aphp	33	France
University Of Turku	31	Finland
Universitat Politecnica De Valencia	30	Spain
Ciber Centro De Investigacion Biomedica En Red	26	Spain
Universidad De Valladolid	26	Spain
University Of Barcelona	22	Spain
Sorbonne Universite	21	France
University Of Granada	20	Spain
University Of Zaragoza	20	Spain
Polytechnic University Of Catalonia	18	Spain
Univ Valladolid	18	Spain
Universite Paris Saclay	18	France
Inria	17	France
Universite De Paris	17	France
University Of Oulu	17	Finland

The distribution of the institutions by country is as follows: Spain: 9, Finland: 2, France: 7.

Statistics referred to these publications indicate the participation of authors of other non-Intencive countries a reflected in the graph 4. England, Italy, USA, Germany, and Netherlands were the five top countries that collaborate in its authorship.

**Graph 4.** Number of Publications in e-Health by of Intencive countries, distributed by the affiliation country of the authors



The list of the 2015-19 top 15 cited publications with authorship with affiliation of at least one of the **Intencive** countries is as follows:

Title	Authors	Source Title	Year	Citations	Intencive Country
Technology in Parkinson's disease: Challenges and opportunities	Espay, Alberto J.; Bonato, Paolo; Nahab, Fatta B.; Maetzler, Walter; Dean, John M.; Klucken, Jochen; Eskofier, Bjoern M.; Merola, Aristide; Horak, Fay; Lang, Anthony E.; Reilmann, Ralf; Giuffrida, Joe; Nieuwboer, Alice; Horne, Malcolm; Little, Max A.; Litvan, Irene; Simuni, Tanya; Dorsey, E. Ray; Burack, Michelle A.; Kubota, Ken; Kamondi, Anita; Godinho, Catarina; Daneault, Jean-Francois; Mitsi, Georgia; Krinke, Lothar; Hausdorff, Jeffery M.; Bloem, Bastiaan R.; Papapetropoulos, Spyros	MOVEMENT DISORDERS	2016	111	<i>Hungary</i>
Why do people use gamification services?	Hamari, Juho; Koivisto, Jonna	INTERNATIONAL JOURNAL OF INFORMATION MANAGEMENT	2015	89	<i>Finland</i>
Working out for likes: An empirical study on social influence in exercise gamification	Hamari, Juho; Koivisto, Jonna	COMPUTERS IN HUMAN BEHAVIOR	2015	83	<i>Finland</i>



Predictors of treatment dropout in self-guided web-based interventions for depression: an 'individual patient data' meta-analysis	Karyotaki, E.; Kleiboer, A.; Smit, F.; Turner, D. T.; Pastor, A. M.; Andersson, G.; Berger, T.; Botella, C.; Breton, J. M.; Carlbring, P.; Christensen, H.; de Graaf, E.; Griffiths, K.; Donker, T.; Farrer, L.; Huibers, M. J. H.; Lenndin, J.; Mackinnon, A.; Meyer, B.; Moritz, S.; Riper, H.; Spek, V.; Vernmark, K.; Cuijpers, P.	PSYCHOLOGICAL MEDICINE	2015	69	<i>Spain</i>
A Web-Based Psychoeducational Program for Informal Caregivers of Patients With Alzheimer's Disease: A Pilot Randomized Controlled Trial	Cristancho-Lacroix, Victoria; Wrobel, Jeremy; Cantegreil-Kallen, Inge; Dub, Timothee; Rouquette, Alexandra; Rigaud, Anne-Sophie	JOURNAL OF MEDICAL INTERNET RESEARCH	2015	52	<i>France</i>
European COMPARative Effectiveness research on blended Depression treatment versus treatment-as-usual (E-COMPARED): study protocol for a randomized controlled, non-inferiority trial in eight European countries	Kleiboer, Annet; Smit, Jan; Bosmans, Judith; Ruwaard, Jeroen; Andersson, Gerhard; Topooco, Naira; Berger, Thomas; Krieger, Tobias; Botella, Cristina; Banos, Rosa; Chevreul, Karine; Araya, Ricardo; Cerga-Pashoja, Arlinda; Cieslak, Roman; Rogala, Anna; Vis, Christiaan; Draisma, Stasja; van Schaik, Anneke; Kemmeren, Lise; Ebert, David; Berking, Matthias; Funk, Burkhardt; Cuijpers, Pim; Riper, Heleen	TRIALS	2016	44	<i>France Spain</i>
Health and Social Media: Perfect Storm of Information	Fernandez-Luque, Luis; Bau, Teresa	HEALTHCARE INFORMATICS RESEARCH	2015	37	<i>Spain</i>
Flexible Data Access Control Based on Trust and Reputation in Cloud Computing	Yan, Zheng; Li, Xueyun; Wang, Mingjun; Vasilakos, Athanasios V.	IEEE TRANSACTIONS ON CLOUD COMPUTING	2017	35	<i>Finland</i>
Web-Based Interventions Targeting Cardiovascular Risk Factors in Middle-Aged and Older People: A Systematic Review and Meta-Analysis	Beishuizen, Cathrien R. L.; Stephan, Blossom C. M.; van Gool, Willem A.; Brayne, Carol; Peters, Ron J. G.; Andrieu, Sandrine; Kivipelto, Miia; Soininen, Hilka; Busschers, Wim B.; van Charante, Eric P. Moll; Richard, Edo	JOURNAL OF MEDICAL INTERNET RESEARCH	2016	30	<i>Finland France</i>

Healthy Ageing Through Internet Counselling in the Elderly: the HATICE randomised controlled trial for the prevention of cardiovascular disease and cognitive impairment	Richard, Edo; Jongstra, Susan; Soininen, Hilkka; Brayne, Carol; van Charante, Eric P. Moll; Meiller, Yannick; van der Groep, Bram; Beishuizen, Cathrien R. L.; Mangialasche, Francesca; Barbera, Mariagnese; Ngandu, Tiia; Coley, Nicola; Guillemont, Juliette; Savy, Stephanie; Dijkgraaf, Marcel G. W.; Peters, Ron J. G.; van Gool, Willem A.; Kivipelto, Miia; Andrieu, Sandrine	BMJ OPEN	2016	30	<i>Finland France</i>
Patient Use of Email for Health Care Communication Purposes Across 14 European Countries: An Analysis of Users According to Demographic and Health-Related Factors	Newhouse, Nikki; Lupianez-Villanueva, Francisco; Codagnone, Cristiano; Atherton, Helen	JOURNAL OF MEDICAL INTERNET RESEARCH	2015	27	<i>Spain</i>
Toward Energy-Efficient and Trustworthy eHealth Monitoring System	Sawand, Ajmal; Djahel, Soufiene; Zhang, Zonghua; Nait-Abdesselam, Farid	CHINA COMMUNICATIONS	2015	27	<i>France</i>
Analysis of Android Device-Based Solutions for Fall Detection	Casilari, Eduardo; Luque, Rafael; Moron, Maria-Jose	SENSORS	2015	26	<i>Spain</i>
Usability problems do not heal by themselves: National survey on physicians' experiences with EHRs in Finland	Kaipio, Johanna; Laaveri, Tinja; Hypponen, Hannele; Vainiomaki, Suvi; Reponen, Jarmo; Kushniruk, Andre; Borycki, Elizabeth; Vanska, Jukka	INTERNATIONAL JOURNAL OF MEDICAL INFORMATICS	2017	25	<i>Finland</i>
Effects of Mobile Learning in Medical Education: A Counterfactual Evaluation	Briz-Ponce, Laura; Antonio Juanes-Mendez, Juan; Jose Garcia-Penalvo, Francisco; Pereira, Anabela	JOURNAL OF MEDICAL SYSTEMS	2016	23	<i>Spain</i>

#### 4.2. Analysis by country and institution e-Health reviews publications

As review publication has usually a higher impact, broader interest and are focused in hotter topics, these were analyzed separately. Its identification was performed by using the “e-Health AND review” tag and selection of of the Intencive countries in the affiliation of the authors in WOS.

The list of reviews of e-Health topics most cited publications with Intencive countries authorship ordered by citation impact is below. For this report it has been selected those with more than 10 cites detected at the moment of preparation of this report:

Title	Authors	Source Title	Year	Citations*	Intencive Country
Mobile Clinical Decision Support Systems and Applications: A Literature and Commercial Review	Martinez-Perez, Borja et al.	JOURNAL OF MEDICAL SYSTEMS	2014	104	Spain
Health 2.0 and Medicine 2.0: Tensions and Controversies in the Field	Hughes, Benjamin et al.	JOURNAL OF MEDICAL INTERNET RESEARCH	2008	104	Spain
Toward personal eHealth in cardiology. Results from the EPI-MEDICS telemedicine project	Rubel, P et al	JOURNAL OF ELECTROCARDIOLOGY	2005	62	France
Preventing the obesity epidemic by second generation tailored health communication: an interdisciplinary review.	Enwald, Heidi et al	Journal of medical Internet research	2010	61	Finland
A Survey on M2M Systems for mHealth: A Wireless Communications Perspective	Kartsakli, Elli et al	SENSORS	2014	59	Spain France
Analysis of the Security and Privacy Requirements of Cloud-Based Electronic Health Records Systems	Rodrigues, Joel J. P. C. Et al	JOURNAL OF MEDICAL INTERNET RESEARCH	2013	50	Spain

Innovations in health care services: The CAALYX system	Rocha, Artur et al	INTERNATIONAL JOURNAL OF MEDICAL INFORMATICS	2013	47	<b>Spain</b>
The impact of patient-physician web messaging on healthcare service provision	McGeady, David et al	INTERNATIONAL JOURNAL OF MEDICAL INFORMATICS	2008	43	<b>Finland</b>
Web-Based Interventions Targeting Cardiovascular Risk Factors in Middle-Aged and Older People: A Systematic Review and Meta-Analysis	Beishuizen, Cathrien R. L et al.	JOURNAL OF MEDICAL INTERNET RESEARCH	2016	30	<b>France Finland</b>
Healthy Ageing Through Internet Counselling in the Elderly: the HATICE randomised controlled trial for the prevention of cardiovascular disease and cognitive impairment	Richard, Edo et al	BMJ OPEN	2016	30	<b>Finland France</b>
Information technology in health promotion	Lintonen, T. P et al	HEALTH EDUCATION RESEARCH	2008	29	<b>Finland</b>
Analysis of Android Device-Based Solutions for Fall Detection	Casilari, Eduardo et al	SENSORS	2015	26	<b>Spain</b>
Human centred design considerations for connected health devices for the older adult.	Harte, Richard P et al	Journal of personalized medicine	2014	26	<b>Spain</b>
From Practice to Theory and back to Practice: Reflexivity in Measurement and Evaluation for Evidence-based Policy Making in the Information Society	Misuraca, Gianluca et al	GOVERNMENT INFORMATION QUARTERLY	2013	18	<b>Spain</b>
Mobile applications in oncology: is it possible for patients	Brouard, Benoit et al	ANNALS OF MEDICINE	2016	17	<b>France</b>

and healthcare professionals to easily identify relevant tools?					
Health search engine with e-document analysis for reliable search results	Gaudinat, A et al	INTERNATIONAL JOURNAL OF MEDICAL INFORMATICS	2006	17	<b>France</b>
Enabling communication and cooperation in bio-nanosensor networks: toward innovative healthcare solutions	Agoulmine, Nazim et al	IEEE WIRELESS COMMUNICATIONS	2012	15	<b>France</b>
A biopsy of Breast Cancer mobile applications: state of the practice review	Giunti, G. et al	INTERNATIONAL JOURNAL OF MEDICAL INFORMATICS	2018	11	<b>Spain Finland</b>
Towards the framework of adaptive user interfaces for eHealth	Vasilyeva, E et al	18th IEEE Symposium on Computer-Based Medical Systems, Proceedings	2005	11	<b>Finland</b>

Main focus topics of these reviews are:

- General aspects: health promotion, social impact, usability, policy making, document analysis. Five documents.
- Use in specific disease or specialties: obesity, cardiology, cardiovascular risk factors, cognitive impairment, fall detection, oncology, breast biopsy. Seven documents.
- Technical issues: wireless, cloud and privacy, bio-nanosensors, adaptative interfaces. Four documents.
- E-Health tool specific: mobile apps, clinical decision support, web messaging. Three documents.

Original review documents listed above are available for internal consultation in:

<https://www.dropbox.com/sh/45zlg58przah00o/AAAP2kr4vFUXnWw9s4ZhgoKsa?dl=0>

## 5. FRANCE E-HEALTH PUBLICATIONS

In the period 2015-2019 a total of 105 publications in WOS included an author with France affiliation.

Top 15 cited publications are listed below ordered by citation impact.

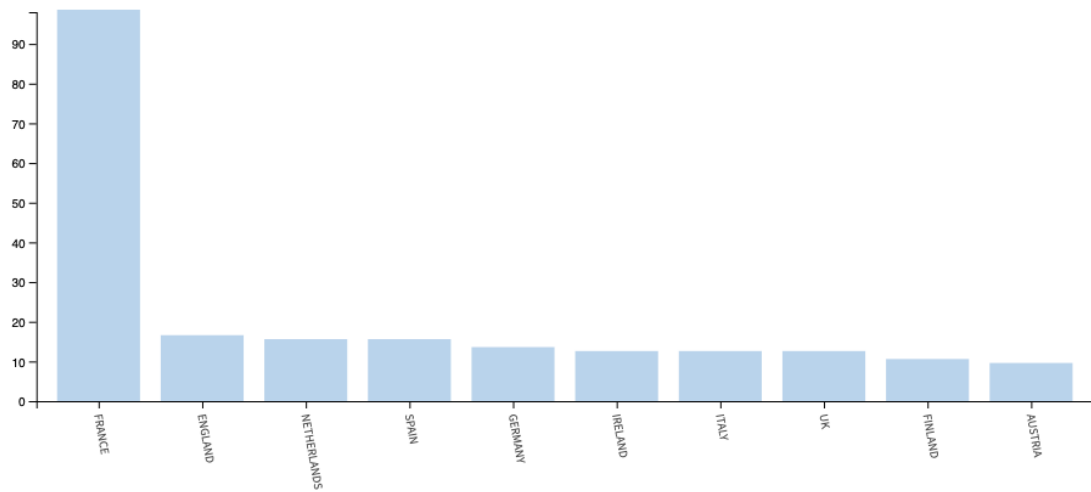
Title	Authors	Source Title	Publication Year	Volume	Issue
A Web-Based Psychoeducational Program for Informal Caregivers of Patients With Alzheimer's Disease: A Pilot Randomized Controlled Trial	Cristancho-Lacroix, Victoria; Wrobel, Jeremy; Cantegreil-Kallen, Inge; Dub, Timothee; Rouquette, Alexandra; Rigaud, Anne-Sophie	JOURNAL OF MEDICAL INTERNET RESEARCH	2015	17	5
European COMPARative Effectiveness research on blended Depression treatment versus treatment-as-usual (E-COMPARED): study protocol for a randomized controlled, non-inferiority trial in eight European countries	Kleiboer, Annet; Smit, Jan; Bosmans, Judith; Ruwaard, Jeroen; Andersson, Gerhard; Topooco, Naira; Berger, Thomas; Krieger, Tobias; Botella, Cristina; Banos, Rosa; Chevreul, Karine; Araya, Ricardo; Cerga-Pashoja, Arlinda; Cieslak, Roman; Rogala, Anna; Vis, Christiaan; Draisma, Stasja; van Schaik, Anneke; Kemmeren, Lise; Ebert, David; Berking, Matthias; Funk, Burkhardt; Cuijpers, Pim; Riper, Heleen	TRIALS	2016	17	
Web-Based Interventions Targeting Cardiovascular Risk Factors in Middle-Aged and Older People: A Systematic Review and Meta-Analysis	Beishuizen, Cathrien R. L.; Stephan, Blossom C. M.; van Gool, Willem A.; Brayne, Carol; Peters, Ron J. G.; Andrieu, Sandrine; Kivipelto, Miia; Soininen, Hilkka; Busschers, Wim B.; van Charante, Eric P. Moll; Richard, Edo	JOURNAL OF MEDICAL INTERNET RESEARCH	2016	18	3
Healthy Ageing Through Internet Counselling in the Elderly: the HATICE randomised	Richard, Edo; Jongstra, Susan; Soininen, Hilkka; Brayne, Carol; van Charante, Eric P. Moll; Meiller, Yannick; van der	BMJ OPEN	2016	6	6

controlled trial for the prevention of cardiovascular disease and cognitive impairment	Groep, Bram; Beishuizen, Cathrien R. L.; Mangialasche, Francesca; Barbera, Mariagnese; Ngandu, Tiia; Coley, Nicola; Guillemont, Juliette; Savy, Stephanie; Dijkgraaf, Marcel G. W.; Peters, Ron J. G.; van Gool, Willem A.; Kivipelto, Miia; Andrieu, Sandrine				
Toward Energy-Efficient and Trustworthy eHealth Monitoring System	Sawand, Ajmal; Djahel, Soufiene; Zhang, Zonghua; Nait-Abdesselam, Farid	CHINA COMMUNICATIONS	2015	12	1
Towards Using Blockchain Technology for eHealth Data Access Management	Rifi, Nabil; Rachkidi, Elie; Agoulmine, Nazim; Taher, Nada Chendeb	2017 FOURTH INTERNATIONAL CONFERENCE ON ADVANCES IN BIOMEDICAL ENGINEERING (	2017		
Mobile applications in oncology: is it possible for patients and healthcare professionals to easily identify relevant tools?	Brouard, Benoit; Bardo, Pascale; Bonnet, Clement; Mounier, Nicolas; Vignot, Marina; Vignot, Stephane	ANNALS OF MEDICINE	2016	48	7
Postoperative monitoring with a mobile application after ambulatory lumbar discectomy: an effective tool for spine surgeons	Debono, Bertrand; Bousquet, Philippe; Sabatier, Pascal; Plas, Jean-Yves; Lescure, Jean-Paul; Hamel, Olivier	EUROPEAN SPINE JOURNAL	2016	25	11
From eHealth to iHealth: Transition to Participatory and Personalized Medicine in Mental Health	Berrouiguet, Sofian; Perez-Rodriguez, Mercedes M.; Larsen, Mark; Baca-Garcia, Enrique; Courtet, Philippe; Oquendo, Maria	JOURNAL OF MEDICAL INTERNET RESEARCH	2018	20	1
Mobile health and maternal care: A winning combination for healthcare in the developing world?	Al Dahdah, Marine; Du Lou, Annabel Desgrees; Meadel, Cecile	HEALTH POLICY AND TECHNOLOGY	2015	4	3

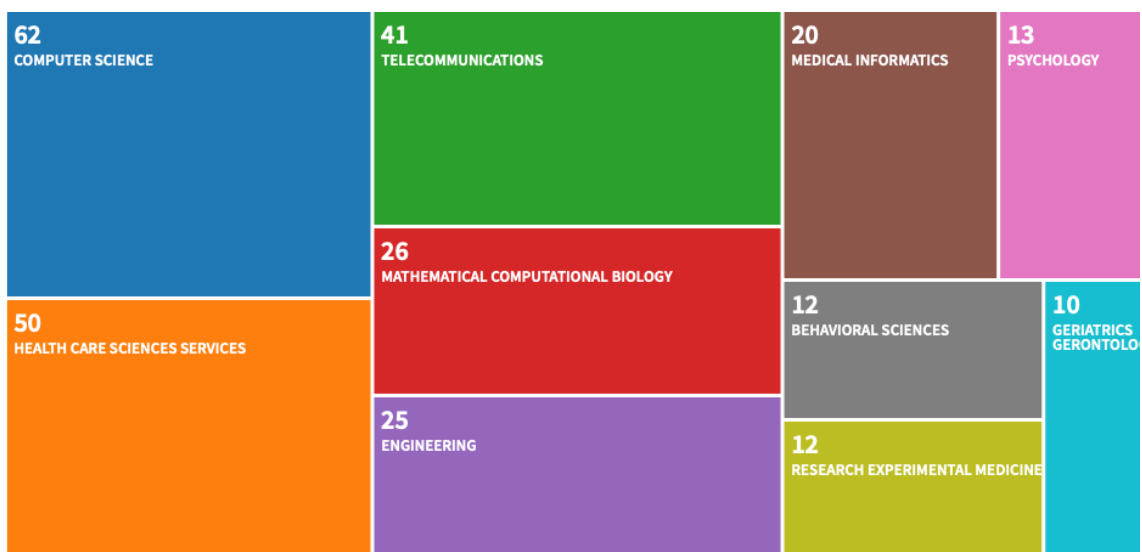
Overview of the CLEF eHealth Evaluation Lab 2015	Goeuriot, Lorraine; Kelly, Liadh; Suominen, Hanna; Hanlen, Leif; Neveol, Aurelie; Grouin, Cyril; Palotti, Joao; Zuccon, Guido	EXPERIMENTAL IR MEETS MULTILINGUALITY, MULTIMODALITY, AND INTERACTION	2015	9283	
A Psychometric Analysis of the Italian Version of the eHealth Literacy Scale Using Item Response and Classical Test Theory Methods	Diviani, Nicola; Dima, Alexandra Lelia; Schulz, Peter Johannes	JOURNAL OF MEDICAL INTERNET RESEARCH	2017	19	4
Use of social media for e-Government in the public health sector: A systematic review of published studies	Tursunbayeva, Aizhan; Franco, Massimo; Pagliari, Claudia	GOVERNMENT INFORMATION QUARTERLY	2017	34	2
Exploratory study of the implications of research on the use of smart connected devices for prevention: a scoping review	Petit, Audrey; Cambon, Linda	BMC PUBLIC HEALTH	2016	16	
Managing the Privacy and Security of eHealth Data	Soceanu, Alexandru; Vasylenko, Maksym; Egner, Alexandru; Muntean, Traian	2015 20TH INTERNATIONAL CONFERENCE ON CONTROL SYSTEMS AND COMPUTER SCIENCE	2015		

Countries that collaborate in France e-Health publications founded in WOS (no date limitation) are reflected in the graph





The number of documents focused in the different research areas are reflected in the graph



Main French institutions involved in these publications are the following (ordered by the number of participations in the authorship).

Institutions	Record Count
Centre National De La Recherche Scientifique CNRS	17
Institut National De La Sante Et De La Recherche Medicale Inserm	15
Universite Paris Saclay	15
Assistance Publique Hopitaux Paris Aphp	7
Universite De Paris	7
Universite D Evry Val D Essonne	6
Universite De Montpellier	6
Universite De Toulouse	6
University Of Paris Descartes	6
Eurecom	5
Institut National De La Sante Et De La Recherche Medicale Inserm	5
Chu De Toulouse	4
Communaute Universite Grenoble Alpes	4
Sorbonne Universite	4
Universite Claude Bernard Lyon 1	4

## 6. FINLAND E-HEALTH PUBLICATIONS

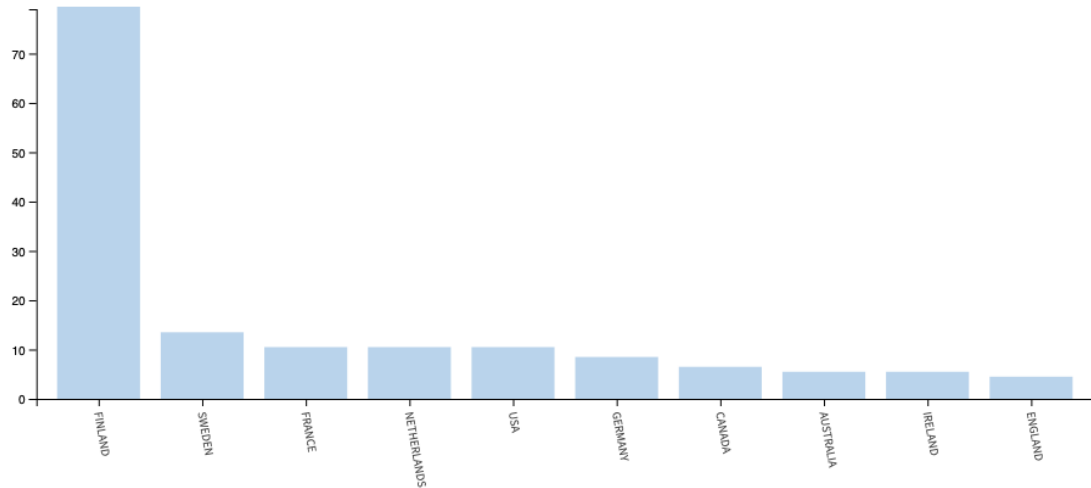
In 2015-2019 a total of 89 publications in WOS included an author with Finland as country in affiliation. Top 15 Finnish cited publications are listed below (ordered by citation).

Title	Authors	Source Title	Publication Year	Volume	Issue
Why do people use gamification services?	Hamari, Juho; Koivisto, Jonna	INTERNATIONAL JOURNAL OF INFORMATION MANAGEMENT	2015	35	4
Working out for likes: An empirical study on social influence in exercise gamification	Hamari, Juho; Koivisto, Jonna	COMPUTERS IN HUMAN BEHAVIOR	2015	50	
Flexible Data Access Control Based on Trust and Reputation in Cloud Computing	Yan, Zheng; Li, Xueyun; Wang, Mingjun; Vasilakos, Athanasios V.	IEEE TRANSACTIONS ON CLOUD COMPUTING	2017	5	3
Web-Based Interventions Targeting Cardiovascular Risk Factors in Middle-Aged and Older People: A Systematic Review and Meta-Analysis	Beishuizen, Cathrien R. L.; Stephan, Blossom C. M.; van Gool, Willem A.; Brayne, Carol; Peters, Ron J. G.; Andrieu, Sandrine; Kivipelto, Miia; Soininen, Hilkkka; Busschers, Wim B.; van Charante, Eric P. Moll; Richard, Edo	JOURNAL OF MEDICAL INTERNET RESEARCH	2016	18	3
Healthy Ageing Through Internet Counselling in the Elderly: the HATICE randomised controlled trial for the prevention of cardiovascular disease and cognitive impairment	Richard, Edo; Jongstra, Susan; Soininen, Hilkkka; Brayne, Carol; van Charante, Eric P. Moll; Meiller, Yannick; van der Groep, Bram; Beishuizen, Cathrien R. L.; Mangialasche, Francesca; Barbera,	BMJ OPEN	2016	6	6

	Mariagnese; Ngandu, Tiia; Coley, Nicola; Guillemont, Juliette; Savy, Stephanie; Dijkgraaf, Marcel G. W.; Peters, Ron J. G.; van Gool, Willem A.; Kivipelto, Miia; Andrieu, Sandrine				
Usability problems do not heal by themselves: National survey on physicians' experiences with EHRs in Finland	Kaipio, Johanna; Laaveri, Tinja; Hypponen, Hannele; Vainiomaki, Suvi; Reponen, Jarmo; Kushniruk, Andre; Borycki, Elizabeth; Vanska, Jukka	INTERNATIONAL JOURNAL OF MEDICAL INFORMATICS	2017	97	
Understanding persuasion contexts in health gamification: A systematic analysis of gamified health behavior change support systems literature	Alahaivala, Tuomas; Oinas-Kukkonen, Harri	INTERNATIONAL JOURNAL OF MEDICAL INFORMATICS	2016	96	
Overview of the CLEF eHealth Evaluation Lab 2015	Goeuriot, Lorraine; Kelly, Liadh; Suominen, Hanna; Hanlen, Leif; Neveol, Aurelie; Grouin, Cyril; Palotti, Joao; Zuccon, Guido	EXPERIMENTAL IR MEETS MULTILINGUALITY, MULTIMODALITY, AND INTERACTION	2015	9283	
A biopsy of Breast Cancer mobile applications: state of the practice review	Giunti, G.; Giunta, D. H.; Guisado- Fernandez, E.; Bender, J. L.; Fernandez-Luque, L.	INTERNATIONAL JOURNAL OF MEDICAL INFORMATICS	2018	110	
Enhancing the provision of health and social care in Europe through eHealth	De Raeve, P.; Gomez, S.; Hughes, P.; Lyngholm, T.; Sipila, M.; Kilanska, D.; Hussey, P.; Xyrichis, A.	INTERNATIONAL NURSING REVIEW	2017	64	1
eHealth in integrated care programs for people with	Melchiorre, Maria Gabriella; Papa, Roberta; Rijken, Mieke; van	HEALTH POLICY	2018	122	1

multimorbidity in Europe: Insights from the ICARE4EU project	Ginneken, Ewout; Hujala, Anneli; Barbabella, Francesco				
Persuasive user experiences of a health Behavior Change Support System: A 12-month study for prevention of metabolic syndrome	Karppinen, Pasi; Oinas-Kukkonen, Harri; Alahaivala, Tuomas; Jokelainen, Terhi; Keranen, Anna-Maria; Salonurmi, Tuire; Savolainen, Markku	INTERNATIONAL JOURNAL OF MEDICAL INFORMATICS	2016	96	
eHealth literacy research-Quo vadis?	Griebel, Lena; Enwald, Heidi; Gilstad, Heidi; Pohl, Anna-Lena; Moreland, Julia; Sedlmayr, Martin	INFORMATICS FOR HEALTH & SOCIAL CARE	2018	43	4
Exploring the Specific Needs of Persons with Multiple Sclerosis for mHealth Solutions for Physical Activity: Mixed-Methods Study	Giunti, Guido; Kool, Jan; Rivera Romero, Octavio; Dorronzoro Zubiete, Enrique	JMIR MHEALTH AND UHEALTH	2018	6	2
Towards 5G Network Slicing over Multiple-Domains	Afolabi, Ibrahim; Ksentini, Adlen; Bagaa, Miloud; Taleb, Tarik; Corici, Marius; Nakao, Akihiro	IEICE TRANSACTIONS ON COMMUNICATIONS	2017	E100B	11

Countries that collaborate in Finnish e-Health 2015-2019 publications detected in WOS are reflected in the graph:



The number of documents focused in the different research areas are reflected in the graph.



Main Finnish institutions that collaborate in the 89 e-Health publications are listed in the table:

Institution	Number of publications
University Of Turku	38
University Of Oulu	26
Abo Akademi University	13
Tampere University	9
Finland National Institute For Health Welfare	8
University Of Helsinki	8
Aalto University	7

## 7. SPAIN E-HEALTH PUBLICATIONS

In 2015-2019 a total of 217 publications in WOS included an author with Spain in the affiliation. Top 15 Spanish cited publications are listed below (ordered by citation).

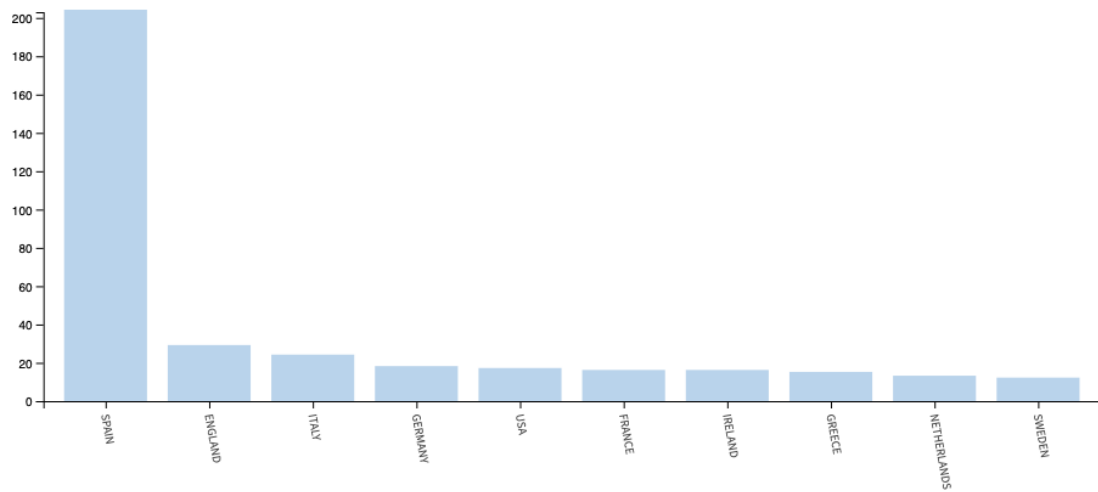
Title	Authors	Source Title	Year	Volume	Issue
Mobile-health: A review of current state in 2015	Silva, Bruno M. C.; Rodrigues, Joel J. P. C.; de la Torre Diez, Isabel; Lopez-Coronado, Miguel; Saleem, Kashif	JOURNAL OF BIOMEDICAL INFORMATICS	2015	56	
The Elderly's Independent Living in Smart Homes: A Characterization of Activities and Sensing Infrastructure Survey to Facilitate Services Development	Ni, Qin; Garcia Hernando, Ana Belen; Pau de la Cruz, Ivan	SENSORS	2015	15	5
Cost-Utility and Cost-Effectiveness Studies of Telemedicine, Electronic, and Mobile Health Systems in the Literature: A Systematic Review	de la Torre-Diez, Isabel; Lopez-Coronado, Miguel; Vaca, Cesar; Saez Aguado, Jesus; de Castro, Carlos	TELEMEDICINE AND E-HEALTH	2015	21	2
QoS-Aware Energy Management in Body Sensor Nodes Powered by Human Energy Harvesting	Ibarra, Ernesto; Antonopoulos, Angelos; Kartsakli, Elli; Rodrigues, Joel J. P. C.; Verikoukis, Christos	IEEE SENSORS JOURNAL	2016	16	2
A systematic review of gamification in e-Health	Sardi, Lamyae; Idri, Ali; Luis Fernandez-Aleman, Jose	JOURNAL OF BIOMEDICAL INFORMATICS	2017	71	
Telehealth System: A Randomized Controlled Trial Evaluating the Impact of an Internet-Based Exercise Intervention on Quality of Life, Pain, Muscle Strength, and Fatigue in Breast Cancer Survivors	Galiano-Castillo, Noelia; Cantarero-Villanueva, Irene; Fernandez-Lao, Carolina; Ariza-Garcia, Angelica; Diaz-Rodriguez, Lourdes; Del-Moral-Avila, Rosario; Arroyo-Morales, Manuel	CANCER	2016	122	20
Attitudes towards digital treatment for depression: A	Topooco, Naira; Riper, Heleen; Araya, Ricardo; Berking, Matthias;	INTERNET INTERVENTIONS-THE APPLICATION OF	2017	8	



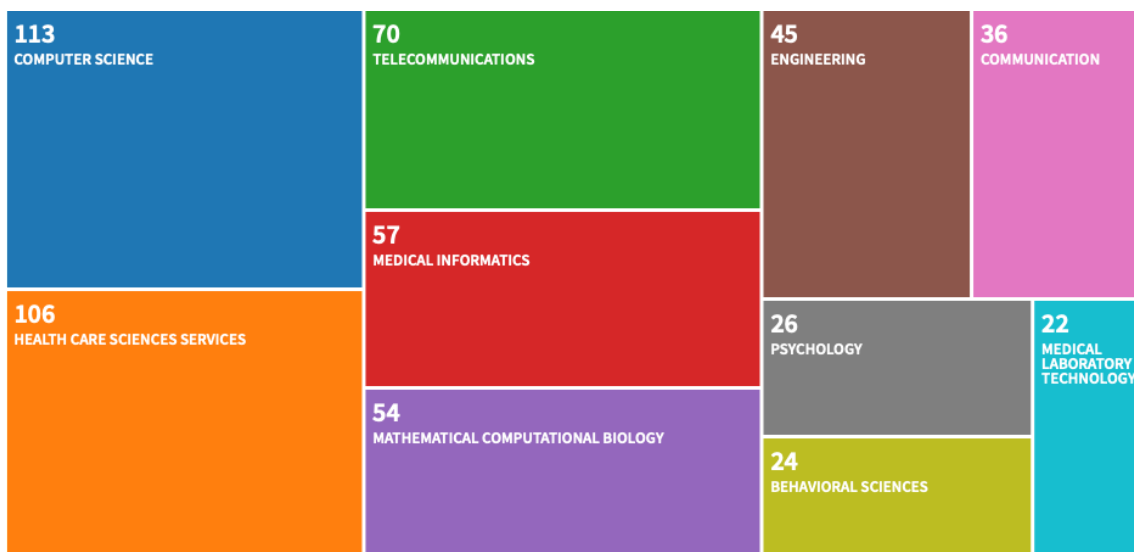
European stakeholder survey	Brunn, Matthias; Chevreul, Karine; Cieslak, Roman; Ebert, David Daniel; Etchmendi, Ernestina; Herrero, Rocio; Kleiboer, Annet; Krieger, Tobias; Garcia-Palacios, Azucena; Cerga-Pashoja, Arlinda; Smoktunowicz, Ewelina; Urech, Antoine; Vis, Christiaan; Andersson, Gerhard	INFORMATION TECHNOLOGY IN MENTAL AND BEHAVIOURAL HEALTH			
How reliable is internet-based self-reported identity, socio-demographic and obesity measures in European adults?	Celis-Morales, Carlos; Livingstone, Katherine M.; Woolhead, Clara; Forster, Hannah; O'Donovan, Clare B.; Macready, Anna L.; Fallaize, Rosalind; Marsaux, Cyril F. M.; Tsirigoti, Lydia; Efsthathopoulou, Eirini; Moschonis, George; Navas-Carretero, Santiago; San-Cristobal, Rodrigo; Kolossa, Silvia; Klein, Ulla L.; Hallmann, Jacqueline; Godlewska, Magdalena; Surwillo, Agnieszka; Drevon, Christian A.; Bouwman, Jildau; Grimaldi, Keith; Parnell, Laurence D.; Manios, Yannis; Traczyk, Iwona; Gibney, Eileen R.; Brennan, Lorraine; Walsh, Marianne C.; Lovegrove, Julie A.; Martinez, J. Alfredo; Daniel, Hannelore; Saris, Wim H. M.; Gibney, Mike; Mathers, John C.	GENES AND NUTRITION	2015	10	5
Cost-effective secure E-health cloud system using identity based cryptographic techniques	Wang, Xu An; Ma, Jianfeng; Xhafa, Fatos; Zhang, Mingwu; Luo, Xiaoshuang	FUTURE GENERATION COMPUTER SYSTEMS- THE INTERNATIONAL JOURNAL OF ESCIENCE	2017	67	
INFLAMMATORY BOWEL DISEASE Diagnostic	Marin-Jimenez, Ignacio; Nos, Pilar; Domenech, Eugeni; Riestra, Sabino;	AMERICAN JOURNAL OF GASTROENTEROLOGY	2016	111	2

Performance of the Simple Clinical Colitis Activity Index Self-Administered Online at Home by Patients With Ulcerative Colitis: CRONICA-UC Study	Gisbert, Javier P.; Calvet, Xavier; Cortes, Xavier; Iglesias, Eva; Huguet, Jose M.; Taxonera, Carlos; Fernandez, Ramon; Carpio, Daniel; Gutierrez, Ana; Guardiola, Jordi; Castro Laria, Luisa; Sicilia, Beatriz; Bujanda, Luis; Cea-Calvo, Luis; Romero, Cristina; Rincon, Oscar; Julia, Berta; Panes, Julian				
A review on trust propagation and opinion dynamics in social networks and group decision making frameworks	Urena, Raquel; Kou, Gang; Dong, Yucheng; Chiclana, Francisco; Herrera-Viedma, Enrique	INFORMATION SCIENCES	2019	478	
Telemedicine in Inflammatory Bowel Disease: Opportunities and Approaches	Peris, Mariam Aguas; Del Hoyo, Javier; Bebia, Paloma; Faubel, Raquel; Barrios, Alejandra; Bastida, Guillermo; Valdivieso, Bernardo; Nos, Pilar	INFLAMMATORY BOWEL DISEASES	2015	21	2
Towards Multi-layer Interoperability of Heterogeneous IoT Platforms: The INTER-IoT Approach	Fortino, Giancarlo; Savaglio, Claudio; Palau, Carlos E.; Suarez de Puga, Jara; Ganzha, Maria; Paprzycki, Marcin; Montesinos, Miguel; Liotta, Antonio; Llop, Miguel	INTEGRATION, INTERCONNECTION, AND INTEROPERABILITY OF IOT SYSTEMS	2018		
Exploiting the FIWARE Cloud Platform to Develop a Remote Patient Monitoring System	Fazio, Maria; Celesti, Antonio; Marquez, Fermin Galan; Glikson, Alex; Villari, Massimo	2015 IEEE SYMPOSIUM ON COMPUTERS AND COMMUNICATION (ISCC)	2015		
A foundational ontology-based model for human activity representation in smart homes	Ni, Qin; Pau de la Cruz, Ivan; Garcia Hernando, Ana Belen	JOURNAL OF AMBIENT INTELLIGENCE AND SMART ENVIRONMENTS	2016	8	1

Countries that collaborate in Spanish e-Health 2015-2019 publications detected in WOS are reflected in the graph



The number of documents focused in the different research areas are reflected in the graph.



Main Spanish institutions that collaborate in the e-Health publications are listed in the table:

Institutions	Number of documents
University Of Barcelona	18
Universitat Politecnica De Valencia	17
Ciber Centro De Investigacion Biomedica En Red	14
Universidad Politecnica De Madrid	13
Polytechnic University Of Catalonia	11
Hospital Clinic De Barcelona	10
Univ Politecn Valencia	9
University Of Granada	9
Uoc Universitat Oberta De Catalunya	9
Universidad Carlos III De Madrid	8
University Of Sevilla	8
Universidad Rey Juan Carlos	7
University Of Valencia	7
Univ Barcelona	6

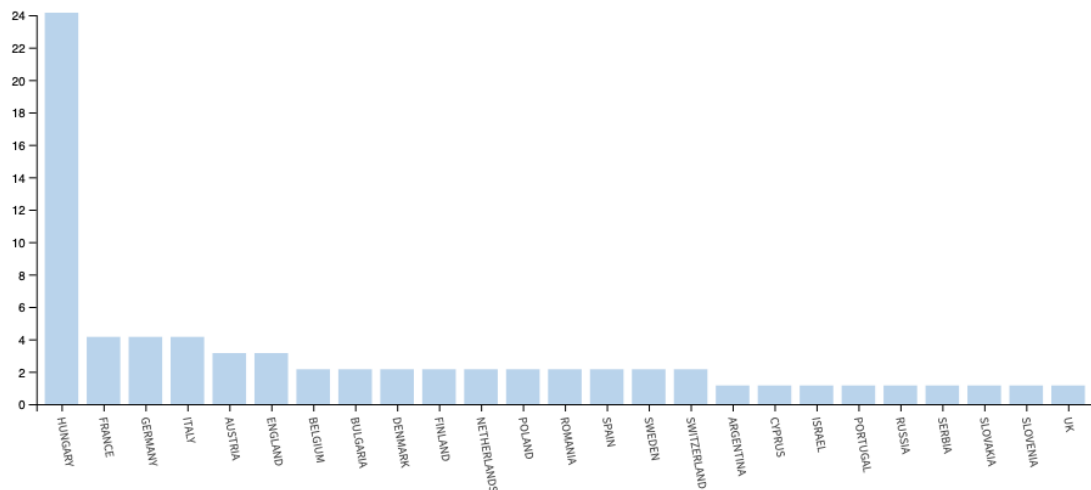
## 8. HUNGARY E-HEALTH PUBLICATIONS

In 2015-2019 a total of 14 publications in WOS included an author with Hungary in the affiliation that are listed below (ordered by citation).

Title	Authors	Source Title	Publication Year	Issue
Activity Recognition in Adaptive Assistive Systems Using Artificial Neural Networks	Oniga, Stefan; Suto, Jozsef	ELEKTRONIKA IR ELEKTROTECHNIKA	2016	1
Developing and evaluating rare disease educational materials co-created by expert clinicians and patients: the paradigm of congenital hypogonadotropic hypogonadism	Badiu, Corin; Bonomi, Marco; Borshchevsky, Ivan; Cools, Martine; Craen, Margarita; Ghervan, Cristina; Hauschild, Michael; HersHKovitz, Eli; Hrabovszky, Erik; Juul, Anders; Kim, Soo-Hyun; Kumanov, Phillip; Lecumberri, Beatriz; Lemos, Manuel C.; Neocleous, Vassos; Niedziela, Marek; Djurdjevic, Sandra Pekic; Persani, Luca; Phan-Hug, Franziska; Pignatelli, Duarte; Pitteloud, Nelly; Popovic, Vera; Quinton, Richard; Skordis, Nicos; Smith, Neil; Stefanija, Magdalena Avbelj; Xu, Cheng; Young, Jacques; Dwyer, Andrew A.	ORPHANET JOURNAL OF RARE DISEASES	2017	
An architecture for m-health services: the CONCERTO project solution	Iacobelli, L.; Panza, G.; Piri, E.; Vehkapera, J.; Mazzotti, M.; Moretti, S.; Cicalo, S.; Bokor, L.; Varga, N.; Martini, M. G.	2015 EUROPEAN CONFERENCE ON NETWORKS AND COMMUNICATIONS (EUCNC)	2015	
ECG Signal Compression Using Adaptive Hermite Functions	Dozsa, Tamas; Kovacs, Peter	ICT INNOVATIONS 2015: EMERGING TECHNOLOGIES FOR BETTER LIVING	2016	
Comprehensive Healthcare Interoperability Framework Integrating Telemedicine Consumer Electronics with Cloud Architecture	Garai, Abel	2017 IEEE 15TH INTERNATIONAL SYMPOSIUM ON APPLIED MACHINE INTELLIGENCE AND INFORMATICS (SAMI)	2017	
Revolutionizing Healthcare with IoT	Garai, Abel; Pentek, Istvan; Adamko, Attila	ACTA POLYTECHNICA HUNGARICA	2019	2

and Cognitive, Cloud-based Telemedicine				
The role of internet-based healthcare services in the healthcare process: the example of a Hungarian health portal	Ban, Attila; Pal, Viktor; Vida, Gyorgy; Fabula, Szabolcs; Dudas, Gabor	INTERNATIONAL JOURNAL OF HEALTHCARE TECHNOLOGY AND MANAGEMENT	2018	2-3
Reflective bio-sensory signal-processing implementing personal assisted e-Health	Garai, Abel; Adamko, Attila; Pentek, Istvan	2018 9TH IEEE INTERNATIONAL CONFERENCE ON COGNITIVE INFOCOMMUNICATIONS (COGINFOCOM)	2018	
Principal steps for monitoring real time patients through ICT in developing Countries	Qehaja, Besnik; Hoxha, Valmir	IFAC PAPERSONLINE	2018	30
Interaction-dependent e-Health hub-software adaptation to cloud-based electronic health records	Adamko, Attila; Garai, Abel; Pentek, Istvan	2017 8TH IEEE INTERNATIONAL CONFERENCE ON COGNITIVE INFOCOMMUNICATIONS (COGINFOCOM)	2017	
The Hungarian Electronic Prescription - a long way from planning to introduction	Bertalan, Lorant; Heja, Gergely	2017 IEEE 30TH NEUMANN COLLOQUIUM (NC)	2017	
Virtual Reality Healthcare System Could Be a Potential Future of Health Consultations	Sik-Lanyi, Cecilia	2017 IEEE 30TH NEUMANN COLLOQUIUM (NC)	2017	
PREVENTISSIMO - HEALTH ASSESSMENT AND COUNSELLING WITH E-HEALTH	Szlanko, Janos Szlanko; Palik, Eva; Schmidt, Judit; Nacs, Zoltan	ANNALS OF NUTRITION AND METABOLISM	2017	
Control engineering approaches at Obuda University for physiological problems	Kovacs, Levente	INES 2016 20th Jubilee IEEE International Conference on Intelligent Engineering Systems	2016	

Countries that collaborate in Hungarian e-Health publications founded in WOS (no date limitation) are reflected in the graph



The number of documents focused in the different research areas are reflected in the graph:



Main institution involved in e-Health Hungarian publications are:

Institution	Number of documents
University Of Debrecen	7
Hungarian Academy Of Sciences	3
Semmelweis University	2
Szeged University	2
4d Soft	1
Budapest University Of Technology Economics	1
Corvinus University Budapest	1
Eotvos Lorand University	1
ICEG European CTR	1
Kognitos Ltd	1

## 9. LIMITATIONS OF THE STUDY



The information of the report has been obtained from selective databases, specifically documents from Web of Science that only gather scientific publications, most of them published in peer review journals, and projects from specific databases the most relevant European funding calls, so other documents and projects that are not fit criteria may be relevant and not identified in this search.

On the other side the descriptor for the search in WOS “ehealth” although specific is relatively restrictive so publications in some related fields (telemedicine, electronic health record, telehealth, mobile health, etc.) may be missed.

That’s why we shared with the partners the information compiled and, through a survey (Appendix 3 – Part A) to the participants, we asked for relevant documents in the participants’ countries didn’t find in the WOS database searching, getting these documents identified by survey.

- **HUNGARY**

- a. Top documents in Hungary

- Stefan/István Oniga; József Sütő – Human activity recognition using neural networks, 2014
    - Magdolna Sass; Adrienn Feko – The Emergence of Telemedicine and e-Health in Hungary, 2011
    - György Vida – The role of internet-based healthcare services in the healthcare process: the example of a Hungarian health portal, 2018
    - Attila Adamko – Reflective bio-sensory signal-processing implementing personal assisted e-Health, 2018

- **FRANCE**

- Other e-Health INTENCIVE countries/regions related documents

« **Ma santé 2022** » (my health 2022) is a strategy released by the French government in late 2018, with actions started in 2019. The objective is to deeply transform the French healthcare system to make it more efficient, through better coordination of health professionals (in particular between in-patient and out-patient professionals). It aims at facilitating access to healthcare for the population, whatever the location. Proximity care, prevention and home care are reinforced. Education and training of health professionals are also considered, with the creation of new positions and diplomas like “medical assistant” or “advanced nurse”. **Digitalisation of the healthcare system is the cornerstone of the strategy**, with a roadmap issued in May 2019. The roadmap is made up of several actions:

- Support innovation
- Improve governance of the digitalisation of healthcare (creation of the French digital health agency...)
- Strengthen interoperability of health information systems
- Create and extend health digital platforms at the national level:
  - The health data hub (repository of health data of the population and facilitation of access to these data)
  - The ENS (Espace Numérique de Santé: health digital space): by 2022, each French citizen will have a consolidated personal health digital file, gathering his/her “shared medical file” - DMP, already existing since 2018, and administrative data.
  - Digital services for health professionals (secure e-messaging, e-prescription, etc.), to harmonize the many public and private offers existing today

Actually private initiatives are also playing a critical role in the transformation of healthcare in France, such as Doctolib, which is a private platform for medical appointments.

- MALTA

- b. Top documents in Malta

- Analysis of the Security and Privacy Requirements of Cloud-Based Electronic Health Records Systems
    - Connectivity for Healthcare and Well-Being Management: Examples from Six European Projects
    - Opportunities and challenges of the Internet of Things for healthcare Systems engineering perspective
    - eHealth Solutions in the Context of Internet of Things

Other relevant publications from Malta are listed below:

- Title: WanderRep: A reporting Tool for Caregivers of Wandering Persons with Dementia. Publication in the Special edition of Xjenza online
  - Title: The Use of Smart Mobile Technology in reducing the burden for Caregivers of wandering persons with Dementia. Publication in the EMMIT 2012 EURO-MEDITERRANEAN MEDICAL INFORMATICS and TELEMEDICINE: 8th International Meeting
  - Agius Muscat, H., Pace, J., & Buttigieg, S. (2019). Digital health in Malta. In N. Azzopardi Muscat, D. Cauchi & T. Melillo Fenech (Eds.), Public Health in Malta : 1999 - 2019 (pp. 25-28). Malta: Malta Association of Public Health Medicine.

- FINLAND

- The most valuable publications in the INTENCIVE countries/regions from Appendix 1:

- 1. Technology in Parkinson's disease: Challenges and opportunities

2. Mobile Clinical Decision Support Systems and Applications: A Literature and Commercial Review
3. Predictors of treatment dropout in self-guided web-based interventions for depression: an 'individual patient data' meta-analysis
4. A Web-Based Psychoeducational Program for Informal Caregivers of Patients With Alzheimer's Disease: A Pilot Randomized Controlled Trial
5. Analysis of the Security and Privacy Requirements of Cloud-Based Electronic Health Records Systems

- **The most valuable publications in Finland from the list provided:**

1. Web-Based Interventions Targeting Cardiovascular Risk Factors in Middle-Aged and Older People: A Systematic Review and Meta-Analysis
2. Healthy Ageing Through Internet Counselling in the Elderly: the HATICE randomised controlled trial for the prevention of cardiovascular disease and cognitive impairment
3. Usability problems do not heal by themselves: National survey on physicians' experiences with EHRs in Finland
4. A biopsy of Breast Cancer mobile applications: state of the practice review
5. Enhancing the provision of health and social care in Europe through eHealth

- **Other relevant Finland publications are listed below**

**Reviews:**

Korhonen ES, Nordman T & Eriksson K. (2015). **Technology and its ethics in nursing and caring journals: An integrative literature review.** Nurs Ethics 22 (5): 561-76.

*Citations in Google Scholar: 35*

Koivunen M & Saranto K. 2018. **Nursing professionals' experiences of the facilitators and barriers to the use of telehealth applications: a systematic review of qualitative studies.** Scand J Caring Sci 32 (1): 24-44.

*Citations in Google Scholar: 27*

Hakala S, Rintala A, Immonen J, Karvanen J, Heinonen A & Sjögren T. (2017). **Effectiveness of technology-based distance interventions promoting physical activity: Systematic review, meta-analysis and meta-regression.** J Rehabil Med 49 (2): 97-105.

*Citations in Google Scholar: 9*

#### Original articles:

Jongstra S, Beishuizen C, Andrieu S, Barbera M, van Dorp M, van de Groep B, Guillemont J, Mangialasche F, van Middelaar T, Moll van Charante E, Soininen H, Kivipelto M & Richard E. (2017). **Development and Validation of an Interactive Internet Platform for Older People: The Healthy Ageing Through Internet Counselling in the Elderly Study.** Telemed J E Health 23 (2): 96-104.

*Citations in Google Scholar: 22*

Rantanen P, Parkkari T, Leikola S, Airaksinen M & Lyles A. (2017). **An In-home Advanced Robotic System to Manage Elderly Home-care Patients' Medications: A Pilot Safety and Usability Study.** Clin Ther 39 (5): 1054-1061.

*Citations in Google Scholar: 15*

Salvi D, Ottaviano M, Muuraiskangas S, Martínez-Romero A, Vera-Muñoz C, Triantafyllidis A, Cabrera Umpiérrez MF, Arredondo Waldmeyer MT, Skobel E, Knackstedt C, Liedes H, Honka A, Luprano J, Cleland JG, Stut W & Deighan C. (2018). **An m-Health system for education and motivation in cardiac rehabilitation: the experience of HeartCycle guided exercise.** J Telemed Telecare 24 (4): 303-316.

*Citations in Google Scholar: 14*

Melkas H. 2013. **Innovative assistive technology in Finnish public elderly-care services: a focus on productivity.** Work 46 (1): 77-91.

*Citations in Google Scholar: 13*

Rantanen T, Lehto P, Vuorinen P & Coco K. (2018). **The adoption of care robots in home care-A survey on the attitudes of Finnish home care personnel.** J Clin Nurs 27 (9-10): 1846-1859.

*Citations in Google Scholar: 12*

Forsman AK, Nordmyr J, Matosevic T, Park AL, Wahlbeck K & McDauid D3 (2018). **Promoting mental wellbeing among older people: technology-based interventions.** Health Promot Int 33 (6): 1042-1054.

*Citations in Google Scholar: 11*

Barbera M, Mangialasche F, Jongstra S, Guillemont J, Ngandu T, Beishuizen C, Coley N, Brayne C, Andrieu S, Richard E, Soininen H & Kivipelto M. (2018). **Designing an Internet-Based Multidomain Intervention for the Prevention of Cardiovascular Disease and Cognitive Impairment in Older Adults: The HATICE Trial.** J Alzheimers Dis 62 (2): 649-663.

*Citations in Google Scholar: 10*

Coco K, Kangasniemi M & Rantanen T. 2018. **Care Personnel's Attitudes and Fears Toward Care Robots in Elderly Care: A Comparison of Data from the Care Personnel in Finland and Japan.** J Nurs Scholarsh. 50 (6): 634-644.

*Citations in Google Scholar: 6*

Bjørkquist C, Forss M & Samuelsen F. (2019). **Collaborative challenges in the use of telecare.** Scand J Caring Sci 33 (1): 93-101.

*Citations in Google Scholar: 4*

Similä H, Immonen M, Toska-Tervola J, Enwald H, Keränen N, Kangas M, Jämsä T & Korpelainen R. (2018). **Feasibility of mobile mental wellness training for older adults.** Geriatr Nurs 39 (5): 499-505.

*Citations in Google Scholar: 3*

- **SPAIN**

Considering the documents listed in the state of the art representative of the main e-documents. It uses a recognized database, peer review documents, and an objective criterion to prioritize them.

However, some published documents (not peer review) may also be relevant and can be missed. We have identified the next following spanish documents that are interesting in order to be added to the list:

**Digitalization in Health. COTEC report. 2019.**

At: [https://cotec.es/media/InformeCotecDigitalizacionenSalud\\_vf.pdf](https://cotec.es/media/InformeCotecDigitalizacionenSalud_vf.pdf).

This report includes the conclusions of the Cotec Working Group on health digitalization, which has been coordinated by Gilead Science and Ernst & Young and has been attended by about twenty representatives of Cotec member entities. Cotec is a non profit organization participated by big companies and banks and presided by the Spanish king that prepare reports in the field of research and innovation.

**EHON Dr. Google report 2019.**

At: <https://laesalud.com/ehon/wp-content/uploads/2019/02/informe-ehon-doctor-google.pdf>.

Report that gather conclusions of healthcare professionals, patients and health communicators gathered at the III EHealth Congress and I Congress #SaludsinBulos (November 2018). This day was supported by the National Association of Health

Informants (ANIS), the main patient associations and different scientific societies and health institutions.

**Report on Digital Transformation in Health in Spain: commitments vs. realities Digital Health Association, 2019.**

At: <https://salud-digital.es/wp-content/uploads/2019/03/Informe-sobre-Transformacion-Digital-en-Salud.pdf>.

Report on the real implementation of information and communication technologies (ICTs) in Spain and the progress made in recent years.

In our opinion the top Spanish documents reflect well the most relevant scientific publications in the field of e-health., and also the institutions that leader them are representative of the Spanish top ehealth research academic institutions

The top ten documents ordered by citations reflect well the most relevant scientific publications in the field of e-health.



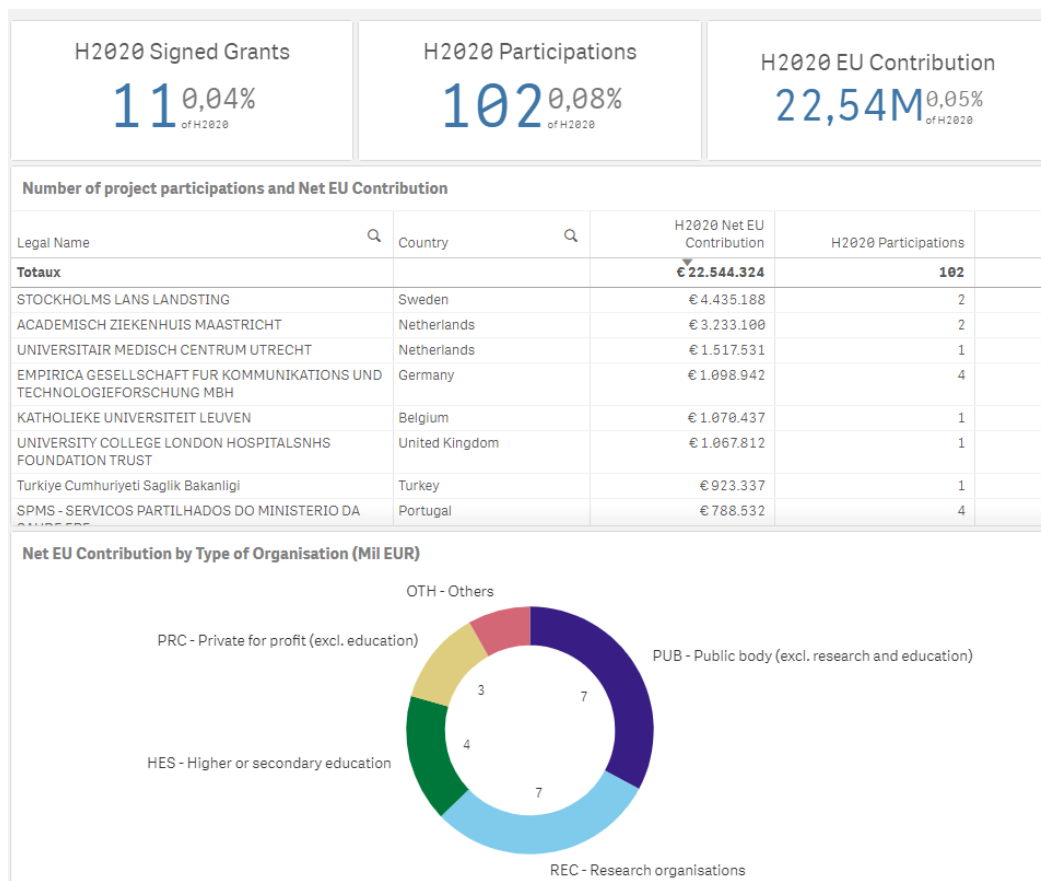
## 10. INTERNATIONAL PROJECTS OVERVIEW

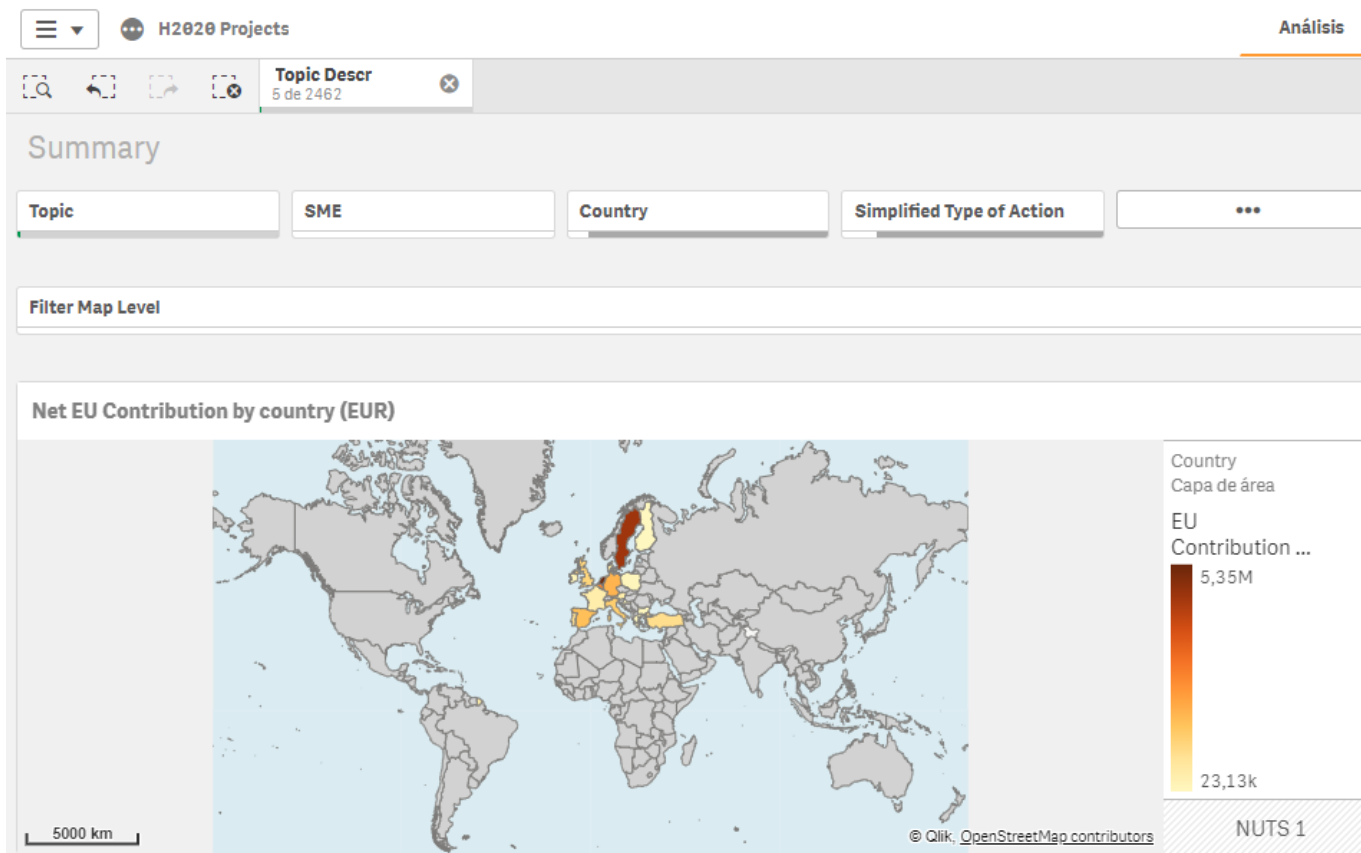
In a first overview of all funded projects recovered by a search in CORDIS Horizon Dashboard (<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/horizon-dashboard>) that is an

intuitive and interactive knowledge platform offering a user-friendly public access to statistics and data on EU research and innovation. It offers:

- Easy access to overview and detailed information on proposals, funded projects and project results, notably reported IPRs and scientific publications,
- Intuitive functions for filtering and drilling down, allowing analysis by geographical location, research thematic area, organization types etc.
- Functions for data export, story-building and bookmarking – log in here to access full Dashboard functionalities

Using this tool with the “e-Health” tag a total of a total of 102 HORIZON 2020 Participations were retrieved.





**Number of project participations and Net EU Contribution by country - region**

Country	H2020 Net EU Contribution	H2020 Participations
<b>Totaux</b>	<b>€ 22.544.324</b>	<b>102</b>
Netherlands	€ 5.354.350	11
Sweden	€ 4.603.857	4
Belgium	€ 2.734.786	15
Germany	€ 1.850.580	11
Spain	€ 1.646.128	11
Italy	€ 1.321.020	15
United Kingdom	€ 1.142.812	2
Turkey	€ 923.337	1
Portugal	€ 858.535	5
Denmark	€ 480.722	4
Austria	€ 434.062	3

Global countries ranking indicate that **Intencive** countries are placed in the middle of the list in relation to the number of proposals in which participate.

## 11. OVERALL INTENCIVE COUNTRY PROJECTS

### 11.1. Analysis by country and institution

A search for collaborative projects in CORDIS focused on e-Health with the tags TOPIC: (e-Health) AND ADDRESS: (France OR Hungary OR Finland OR Spain OR Malta) in the last 5 years (HORIZON 2020 that covers 2014-2019) has yield 20 proposals and 10 funded projects.

H2020 Projects

Análisis

Country

5 de 258

Partner Type

BENEFICIARY

Thematic Priorit...

Health, demographic...

Topic Descr

5 de 2462

SME Flag

TODOS

Summary

Q Topic

Q SME

Q Country

Q Simplified Type of Action

eHealth interoperability

✓

EU eHealth Interoperability conformit...

✓

PCP - eHealth innovation in empower...

✓

Presidency events - eHealth

✓

Public procurement of innovative eHe...

✓

A COMPREHENSIVE 'PAEDIATRIC P...

A sustainable European induced pluri...

Accelerating market introduction of I...

Actions in support of the Internationa...

Actions to bridge the divide in Europe...

Adaptive smart working and living en...

ADDRESSING THE CLINICAL BURDE...

Addressing the urgent research gaps ...

Advanced ICT systems and services f...

Advancing active and healthy ageing ...

Advancing active and healthy ageing ...

Advancing active and healthy ageing ...

Advancing bioinformatics to meet bio...

Analysing the infectious disease burd...

Assessing Risk and Progression of Pr...

Assessment of the uniqueness of dia...

Big Data supporting Public Health pol...

No

✓

Yes

✓

Finland

✓

France

✓

Malta

✓

Spain

✓

Austria

Belgium

Bulgaria

Croatia

Denmark

Germany

Greece

Ireland

Italy

Luxembourg

Netherlands

Poland

Portugal

Sweden

Switzerland

Turkey

United Kingdom

Hungary

✓

Coordination and support action

Pre-Commercial Procurement

Public Procurement of Innovative sol...

Advanced Grant

Co-funding of regional, national and L...

COFUND (European Joint Programme)

Consolidator Grant

ERA-NET Cofund

ERC low value grant

Grant to identified beneficiary - Coord...

Innovation action

Innovation action Lump Sum

Innovation Action Lump-Sum

Marie Skłodowska-Curie Individual F...

Marie Skłodowska-Curie Innovative T...

Proof of Concept Grant

Research and Innovation action

Research and Innovation action Lum...

Research and Innovation Action Lum...

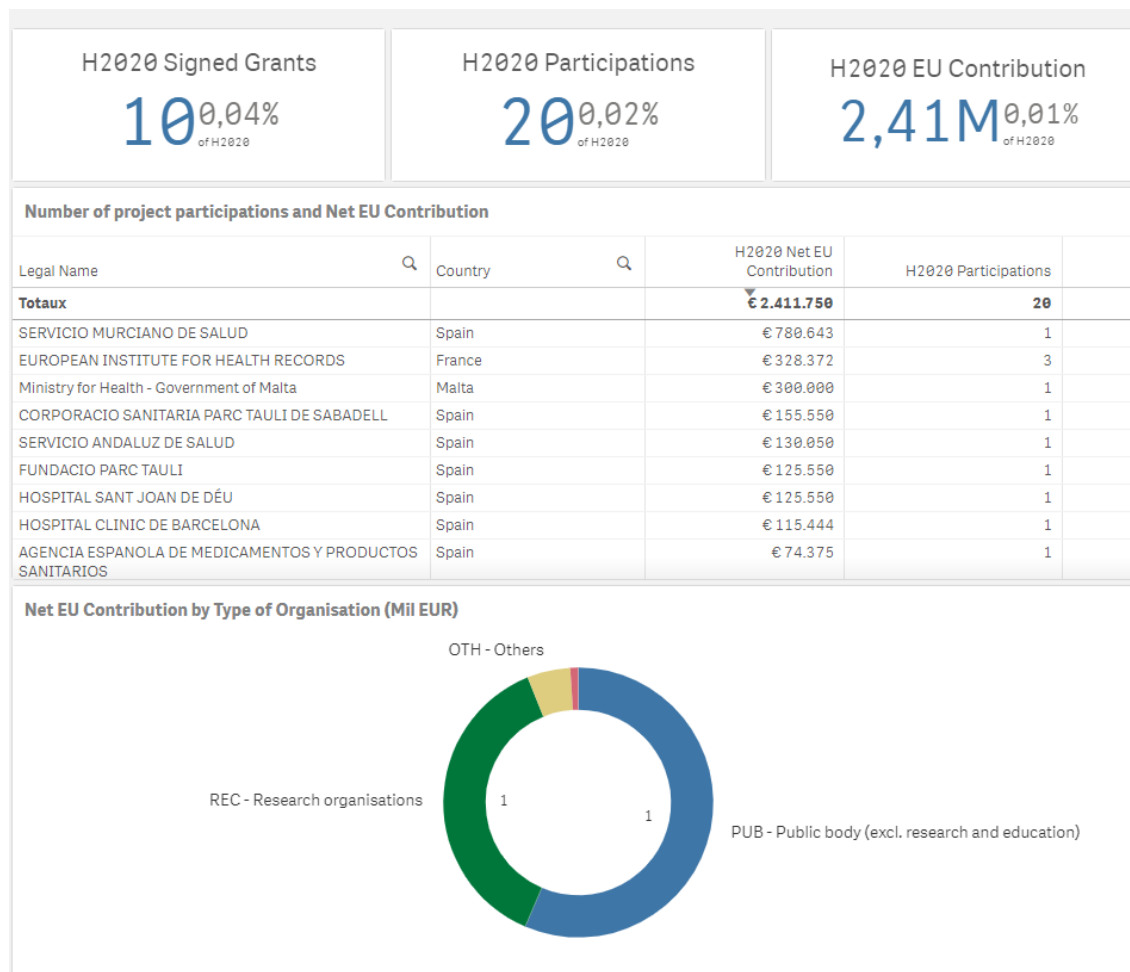
RISE

SME instrument phase 1

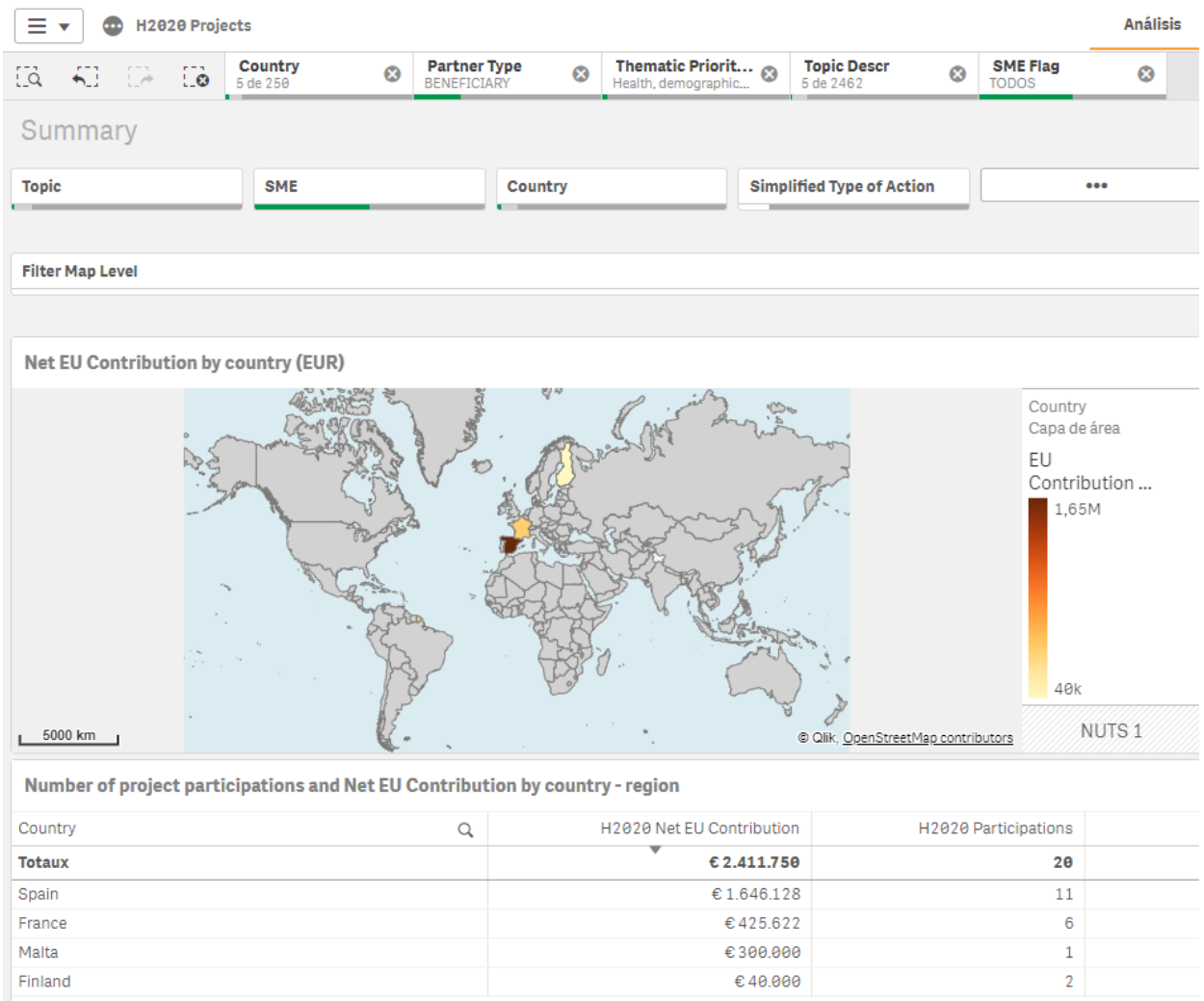
SME instrument phase 2

Graph xx. Selected ITEMS for the search

The number of proposals by country and the funding contribution are reflected in the graphs.



Regarding the EU contribution in the INTENCIVE country partners, the following map shows the most active countries



Number of projects in e-Health with participants of Intencive countries.

Country	Number of projects
Spain	11
France	6
Finland	2
Hungary	0
Malta	1

The institutions that have been funded under the H2020 Programme in the e-Health Topic are reflected in the table ordered by the H2020 Net EU Contribution

Institutions	H2020 Net EU Contribution	Country
SERVICIO MURCIANO DE SALUD	780.643	Spain
EUROPEAN INSTITUTE FOR HEALTH RECORDS	328.372	France
Ministry for Health - Government of Malta	300.000	Malta
CORPORACIO SANTIARIA PARC TAULI DE SABADELL	155.550	Spain
SERVICIO ANDALUZ DE SALUD	130.050	Spain
FUNDACIO PARC TAULI	125.550	Spain
HOSPITAL SANT JOAN DE DEU	125.550	Spain
HOSPITAL CLINIC DE BARCELONA	115.444	Spain
AGENCIA ESPAÑOLA DE MEDICAMENTOS Y PRODUCTOS SANITARIOS	74.375	Spain
FUNDACION PARA LA FORMACION E INVESTIGACION SANITARIAS DE LA REGION DE MURCIA	54.478	Spain
MINISTERE DES AFFAIRES SOCIALES ET DE LA SANTE	48.750	France
AGENCIA DE QUALITAT I AVALUACIO SANITARIES DE CATALUNYA	42.975	Spain
TICBIOMED TECNOLOGIAS DE LA INFORMACION PARA LA SALUD EN LA REGION DE MURCIA ASOCIACION	41.513	Spain
AGENCE NATIONALE DES SYSTEMES D INFORMATION PARTAGES DE SANTE	27.250	France
LAUREA-AMMATTIKORKEAKOULU OY	22.500	Finland
INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE	21.250	France
TERVEYDEN JA HYVINVOINNIN LAITOS	17.500	Finland

The distribution of the institutions by country is as follows: Spain: 10, Finland: 2, France: 4, Malta: 1.

The list of the 2014-19 funded projects with title, acronym, thema, budget and topic description with the participation of at least one of the **Intencive** countries is as follows:

Project Acronym	Project Title	Thema	H2020 EU Contribution	ToA	Topic Code	Topic description
ProEmpower	Procuring innovative ICT for patient empowerment and self-management for type 2 diabetes mellitus	Health, demographic change and wellbeing	€ 876.634	Pre-Commercial Procurement	SC1-PM-12-2016	PCP - eHealth innovation in empowering the patient
STARS	Empowering Patients by Professional Stress Avoidance and Recovery Services	Health, demographic change and wellbeing	€ 446.625	Pre-Commercial Procurement	SC1-PM-12-2016	PCP - eHealth innovation in empowering the patient
EHW17	High Level eHealth Conference 2017	Health, demographic change and wellbeing	€ 300.000	Coordination and support action	IBA-SC1-eHealth-2017	Presidency events - eHealth
VALUeHEALTH	Establishing the value and business model for sustainable eHealth services in Europe - VALUeHEALTH	Health, demographic change and wellbeing	€ 199.172	Coordination and support action	PHC-34-2014	eHealth interoperability
THALEA II	THALEA II - Telemonitoring and Telemedicine for Hospitals Assisted by ICT for Life saving co-morbid patients in Europe As part of a Patient personalised care program of the EU	Health, demographic change and wellbeing	€ 155.550	COFUND (PPI)	PHC-29-2015	Public procurement of innovative eHealth services
LIVE INCITE	Lifestyle intervention in the perioperative process through digital service	Health, demographic change and wellbeing	€ 115.444	Pre-Commercial Procurement	SC1-PM-12-2016	PCP - eHealth innovation in empowering the patient
eStandards	eHealth Standards and Profiles in Action for Europe and Beyond	Health, demographic change and wellbeing	€ 115.200	Coordination and support action	PHC-34-2014	eHealth interoperability
ASSESS CT	Assessing SNOMED CT for Large Scale eHealth Deployments in the EU	Health, demographic change and wellbeing	€ 101.500	Coordination and support action	PHC-34-2014	eHealth interoperability
openMedicine	openMedicine	Health, demographic	€ 74.375	Coordination and support action	PHC-34-2014	eHealth interoperability

		change and wellbeing				
EURO-CAS	EU eHealth Interoperability Conformity Assessment Scheme	Health, demographic change and wellbeing	€ 27.250	Coordination and support action	SC1-HCO-15-2016	EU eHealth Interoperability conformity assessment

## 11.2. Analysis by country and institution e-Health International projects

The list of funded e-Health projects with Intencive countries as partners is below:

Project Acronym	Project Title	H2020 EU Contribution	Country	Entity
ProEmpower	Procuring innovative ICT for patient empowerment and self-management for type 2 diabetes mellitus	€ 876.634	Spain	<ul style="list-style-type: none"> <li>SERVICIO MURCIANO DE SALUD</li> <li>FUNDACION PARA LA FORMACION E INVESTIGACION SANITARIAS DE LA REGION DE MURCIA</li> <li>TICBIOMED TECNOLOGIAS DE LA INFORMACION PARA LA SALUD EN LA REGION DE MURCIA</li> </ul>
STARS	Empowering Patients by Professional Stress Avoidance and Recovery Services	€ 446.625	Finland Spain	<ul style="list-style-type: none"> <li>LAUREA-AMMATTIKORKEAKOULU OY (Finland)</li> <li>SERVICIO ANDALUZ DE SALUD (Spain)</li> <li>HOSPITAL SANT JOAN DE DÉU (Spain)</li> <li>FUNDACIO PARC TAULI (Spain)</li> <li>AGENCIA DE QUALITAT I AVALUACIO SANITARIAS DE CATALUNYA (Spain)</li> </ul>
EHW17	High Level eHealth Conference 2017	€ 300.000	Malta	<ul style="list-style-type: none"> <li>Ministry for Health - Government of Malta</li> </ul>
VALUeHEALTH	Establishing the value and business model for sustainable eHealth services in Europe - VALUeHEALTH	€ 199.172	France	<ul style="list-style-type: none"> <li>EUROPEAN INSTITUTE FOR HEALTH RECORDS</li> <li>MINISTERE DES AFFAIRES SOCIALES ET DE LA SANTE</li> </ul>
THALEA II	THALEA II - Telemonitoring and Telemedicine for Hospitals Assisted by ICT for Life saving co-morbid patients in Europe As part of a Patient personalised care program of the EU	€ 155.550	Spain	<ul style="list-style-type: none"> <li>CORPORACIO SANITARIA PARC TAULI DE SABADELL</li> <li>AGENCIA DE QUALITAT I AVALUACIO SANITARIAS DE CATALUNYA (Spain)</li> </ul>
LIVE INCITE	Lifestyle intervention in the perioperative process through digital service	€ 115.444	Spain	<ul style="list-style-type: none"> <li>HOSPITAL CLINIC DE BARCELONA</li> <li>HOSPITAL CLINICO Y PROVINCIAL DE BARCELONA</li> </ul>



eStandards	eHealth Standards and Profiles in Action for Europe and Beyond	€ 115.200	France	<ul style="list-style-type: none"> <li>• EUROPEAN INSTITUTE FOR HEALTH RECORDS</li> </ul>
ASSESS CT	Assessing SNOMED CT for Large Scale eHealth Deployments in the EU	€ 101.500	France Finland	<ul style="list-style-type: none"> <li>• EUROPEAN INSTITUTE FOR HEALTH RECORDS (France)</li> <li>• INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE (France)</li> <li>• TERVEYDEN JA HYVINVOINNIN LAITOS (Finland)</li> </ul>
openMedicine	openMedicine	€ 74.375	Spain	<ul style="list-style-type: none"> <li>• AGENCIA ESPANOLA DE MEDICAMENTOS Y PRODUCTOS SANITARIOS (Spain)</li> </ul>
EURO-CAS	EU eHealth Interoperability Conformity Assessment Scheme	€ 27.250	France	<ul style="list-style-type: none"> <li>• AGENCE NATIONALE DES SYSTEMES D'INFORMATION PARTAGES DE SANTE</li> </ul>

## 12. FRANCE E-HEALTH PROJECTS

In the period 2014-2019 a total of 6 proposals in CORDIS included a French entity. But only 4 were funded.

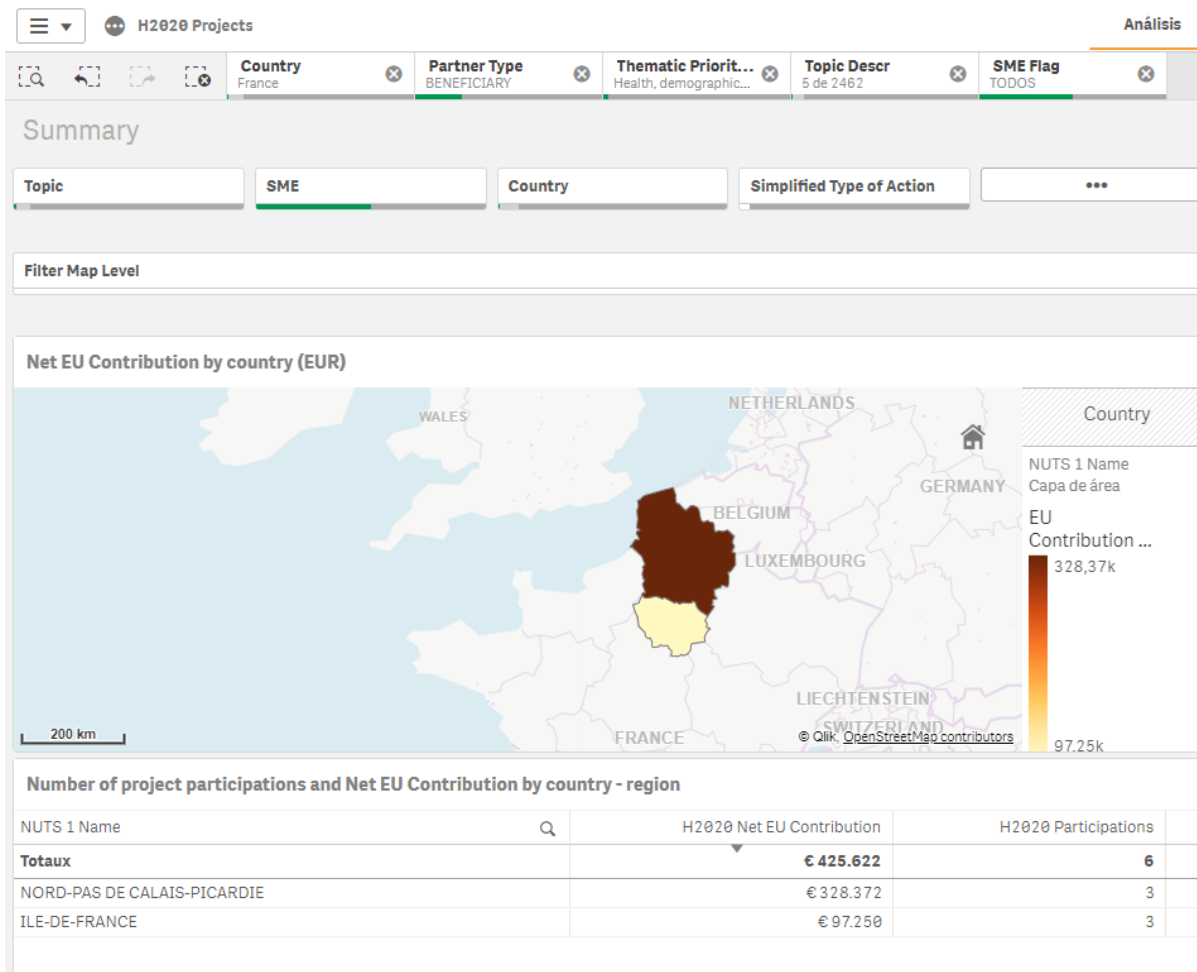
H2020 Signed Grants <b>4</b> 0,02% of H2020	H2020 Participations <b>6</b> 0,00% of H2020	H2020 EU Contribution <b>425,6k</b> 0,00% of H2020
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Number of project participations and Net EU Contribution				
Legal Name	NUTS 1 Name	H2020 Net EU Contribution	H2020 Participations	
<b>Totaux</b>		<b>€ 425.622</b>	<b>6</b>	
EUROPEAN INSTITUTE FOR HEALTH RECORDS	NORD-PAS DE CALAIS-PICARDIE	€ 328.372	3	
MINISTERE DES AFFAIRES SOCIALES ET DE LA SANTE	ILE-DE-FRANCE	€ 48.750	1	
AGENCE NATIONALE DES SYSTEMES D INFORMATION PARTAGES DE SANTE	ILE-DE-FRANCE	€ 27.250	1	
INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE	ILE-DE-FRANCE	€ 21.250	1	

Net EU Contribution by Type of Organisation (Mil EUR)	
PUB - Public body (excl. research and education)	0
REC - Research organisations	0



The 4 funded projects are listed below.

#### 1. ASSESS CT - Assessing SNOMED CT for Large Scale eHealth Deployments in the EU

Project ID: 643818

From 2015-02-01 to 2016-07-31, closed project

#### Project details

##### Objective

ASSESS CT will contribute to better semantic interoperability of eHealth services in Europe, in order to optimise care and to minimise harm in delivery of care. In a joint one-year effort, the ASSESS CT consortium will investigate the fitness of the clinical terminology SNOMED CT as a potential standard for EU-wide eHealth deployments, scrutinising clinical, technical, financial, and organisational aspects. Unbiased towards SNOMED CT adoption, the ASSESS CT project will employ established evaluation approaches from social science. It will scrutinise adoption against two alternative scenarios: to abstain from actions at the EU level, or to devise an EU-wide semantic

interoperability framework without SNOMED CT. ASSESS CT will review the current state of SNOMED CT through survey and focus group, regarding its use by IHTSDO members and the fulfilment of semantic interoperability use cases, the relationship with EU-wide recommendations, known technical and organizational drawbacks, and maintenance of the terminology. A series of studies using sampled clinical data will provide new evidence about conceptual and term coverage for selected languages, as well as technical fitness in manual and automated semantic annotation scenarios. The consortium will also analyse the impact of SNOMED CT adoption from a socio-economic viewpoint, encompassing management, business, organisational, and governance aspects. Validation of all working tasks, both political and domain-specific, will be secured through four large workshops with a list of distinguished experts assembled in an Expert Panel, Committee of MS Representatives, and national focus groups. Sufficient budget is reserved, also for coordination across the parallel H2020 Call PHC34 projects. Concrete strategy recommendations will be delivered to both MS, the EC, and SDOs about how SNOMED CT can scale up successful adoption and contribute to building a EU eHealth Interoperability Framework.

#### **Coordinator**

HOCHSCHULE NIEDERRHEIN (Germany)

#### **Participants**

- HL7 INTERNATIONAL FONDATION (Belgium)
- MEDIZINISCHE UNIVERSITAT GRAZ (Austria)
- Averbis GmbH (Germany)
- EUROPEAN INSTITUTE FOR HEALTH RECORDS (France)
- EMPIRICA GESELLSCHAFT FUR KOMMUNIKATIONS UND TECHNOLOGIEFORSCHUNG MBH (Germany)
- ACADEMISCH MEDISCH CENTRUM BIJ DE UNIVERSITEIT VAN AMSTERDAM (Netherlands)
- STICHTING NATIONAAL ICT INSTITUUT IN DE ZORG (Netherlands)
- REGIONE LOMBARDIA (Italy)
- AALBORG UNIVERSITET (Denmark)
- LINKOPINGS UNIVERSITET (Sweden)
- INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE (France)
- HRVATSKI ZAVOD ZA ZDRAVSTVENO OSIGURANJE (Croatia)
- TERVEYDEN JA HYVINVOINNIN LAITOS (Finland)

## **2. VALUeHEALTH - Establishing the value and business model for sustainable eHealth services in Europe**

From 2015-04-01 to 2017-06-30 | VALUeHEALTH Website

## Project details

### Objective

VALUEHEALTH will establish how eHealth interoperability can create and deliver value for all stakeholders, for a sustainable market in scaling up cross-border services. We will develop an evidence-based business plan for interoperability, beginning with CEF support and then sustainable revenue streams for developing and operating self-funding priority pan-European eHealth Services beyond 2020.

Our rich multi-stakeholder consortium of experienced partners and funded experts will fuse many essential viewpoints to action the work and importantly endorse and champion our business plan to ensure sustainability of the CEF beyond 2020.

Starting with use cases already proposed for the CEF by the eHealth Network, we will adopt a robust methodology to prioritise additional use cases relevant to Member States for cross-border and also within border health needs.

We will design a business model and multiple stakeholder Value Propositions for European-scale interoperability, construct the multisided market needed to sustain investments in CEF services and perform Cost Benefit Assessment and risk assessments. We will analyze costs for delivering the prioritised use cases, developing and maintaining the required assets and derive a costed deployment roadmap for generic and healthcare-specific services. We will provide a gap analysis of standards, specifications and translations plus their priority and estimated cost.

We will collate success strategies for promoting EHRs, and of organisational changes needed to capitalise on richly interoperable EHRs, as a roadmap of scale-up adoption strategies, incentives and funders.

Finally, we will integrate and validate these results in a definitive Business Plan and Sustainability Strategy for public-private investment in digital eHealth services, as clear guidance to the CEF on how it may construct its digital service infrastructure Building Blocks for health, to ensure maximum value and optimal sustainability beyond 2020.

### Coordinator

EUROPEAN INSTITUTE FOR HEALTH RECORDS (France)

### Participants

- MINISTERE DES AFFAIRES SOCIALES ET DE LA SANTE (France)
- NHS HEALTH AND SOCIAL CARE INFORMATION CENTRE (United Kingdom)
- REGIONE LOMBARDIA (Italy)
- SPMS - SERVICOS PARTILHADOS DO MINISTERIO DA SAUDE EPE (Portugal)
- EMPIRICA GESELLSCHAFT FUR KOMMUNIKATIONS UND TECHNOLOGIEFORSCHUNG MBH (Germany)
- DATA MINING INTERNATIONAL SA (Switzerland)
- RESEARCH IN ADVANCED MEDICAL INFORMATION AND TELEMATICS VZW (Belgium)

- EUROPEAN HEALTH TELEMATICS ASSOCIATION (Belgium)

### 3. eStandards - eHealth Standards and Profiles in Action for Europe and Beyond

Project ID: 643889

From 2015-05-01 to 2017-07-31 | eStandards Website

#### Project details

#### Objective

The eStandards CSA is proposed by HL7, CEN TC251, & IHE, leading Standards Organizations (SDOs), and is supported by the eHealth Network, ISO TC215, GS1, IHTSDO, IEEE11073, and IMIA to advance eHealth interoperability and global alignment of standards with seven objectives:

1. Join up with Stakeholders in Europe and globally to build consensus on eHealth standards, accelerate knowledge-sharing, and promote wide adoption of standards.
2. Deliver an evidence-based Roadmap for alignment, iterative consolidation, and broad acceptance of eStandards that is endorsed by SDOs, the eHealth Network, the providers, and the Industry.
3. Contribute to the eHealth Interoperability Framework use cases focusing on clinical content modelling for different paradigms and embed a Quality Management System for interoperability testing & certification of eHealth systems.
4. Collect evidence and provide guidance on the coexistence of competing or overlapping standards in large-scale eHealth deployment nationally and cross-border.
5. Participate in EU/US MoU roadmap actions as the international patient summaries standard.
6. Explore socio-economic aspects of eHealth interoperability, revisiting the language for user-vendor interaction that embodies 'co-making' in trust, collaboration and long-term engagement.
7. Align across PHC-34 to nurture innovation, sustainability & growth under CEF and beyond contributing to Key actions of the Digital Agenda 2020.

The proposal's ambition is to strengthen Europe's voice and impact, while reinforcing the bridges established with the EU Patient Summary guideline across the Atlantic in Trillium Bridge and among MS with epSOS, eSENS, Antilope, and EXPAND.

The eStandards Roadmap and associated evidence base, a white paper on the need for formal standards, and two guidelines addressing how to work with: (a) clinical content in profiles and (b) competing standards in large-scale eHealth deployments will be pragmatic steps toward alignment and convergence.

#### Coordinator

## RESEARCH IN ADVANCED MEDICAL INFORMATION AND TELEMATICS VZW (Belgium)

### Participants

- HL7 INTERNATIONAL FONDATION (Belgium)
- STICHTING KONINKLIJK NEDERLANDS NORMALISATIE INSTITUUT (Netherlands)
- INTEGRATING THE HEALTHCARE ENTERPRISE-EUROPE AISBL (Belgium)
- EUROPEAN INSTITUTE FOR HEALTH RECORDS (France)
- MEDIQ AS (Denmark)
- OFFIS EV (Germany)
- REGIONE LOMBARDIA (Italy)
- STICHTING NATIONAAL ICT INSTITUUT IN DE ZORG (Netherlands)
- FEDERATION EUROPEENNE DES HOPITAUX ET DES SOINS DE SANTE (Belgium)
- COMITE EUROPEEN DE COORDINATION DES INDUSTRIES RADIOLOGIQUES ELECTROMEDICALES ET D INFORMATIQUE DE SANTE AISBL (Belgium)
- SPMS - SERVICOS PARTILHADOS DO MINISTERIO DA SAUDE EPE (Portugal)

## 4. EURO-CAS - EU eHealth Interoperability Conformity Assessment Scheme

Project ID: 727028

From 2016-12-01 to 2018-11-30 | EURO-CAS Website

### Project details

#### Objective

EURO-CAS, European eHealth Interoperability Conformity Assessment Scheme aims at maintaining and developing the adoption and take-up of testing the interoperability of ICT solutions against identified eHealth standards and profiles defined in the eHealth European Interoperability Framework (eEIF). The key deliverable is a sustainable Conformity Assessment Scheme (CAS) for Europe. Based on recommendations of the Antilope project and the state-of-art in interoperability testing in eHealth, EURO-CAS is committed to putting in place an operational CAS based on ISO/IEC 17025 that will meet the interoperability requirements of European eHealth projects as well as national and regional eHealth programs. This will allow testing the interoperability capabilities of products and services for a single digital market in eHealth in Europe in line with the Digital Agenda for Europe and based on international profiles and standards. The project will gather a multi-disciplinary consortium of high-level expertise, including organizations focused on implementing international standards as well as industry stakeholders and healthcare providers that will 1) review the state of the art of existing interoperability CAS, 2) collect the requirements and needs from cross border, national/regional levels, 3) establish the CAS for Europe with implementation guidelines and governance, 4) propose business models for the CAS for Europe, 5) validate results and foresee

national/regional adoption, 6) inform and educate eHealth stakeholders and motivate industry and projects to participate in a European accreditation process. The CAS for Europe will provide a comprehensive framework completing the eEIF and aligned with the international CAS. Its flexibility will allow better sustainability and harmonization at European, national and regional levels.

### Coordinator

EIBIR GEMEINNUETZIGE GMBH ZUR FOERDERUNG DER ERFORSCHUNG DER BIOMEDIZINISCHEN BILDGEBUNG (Austria)

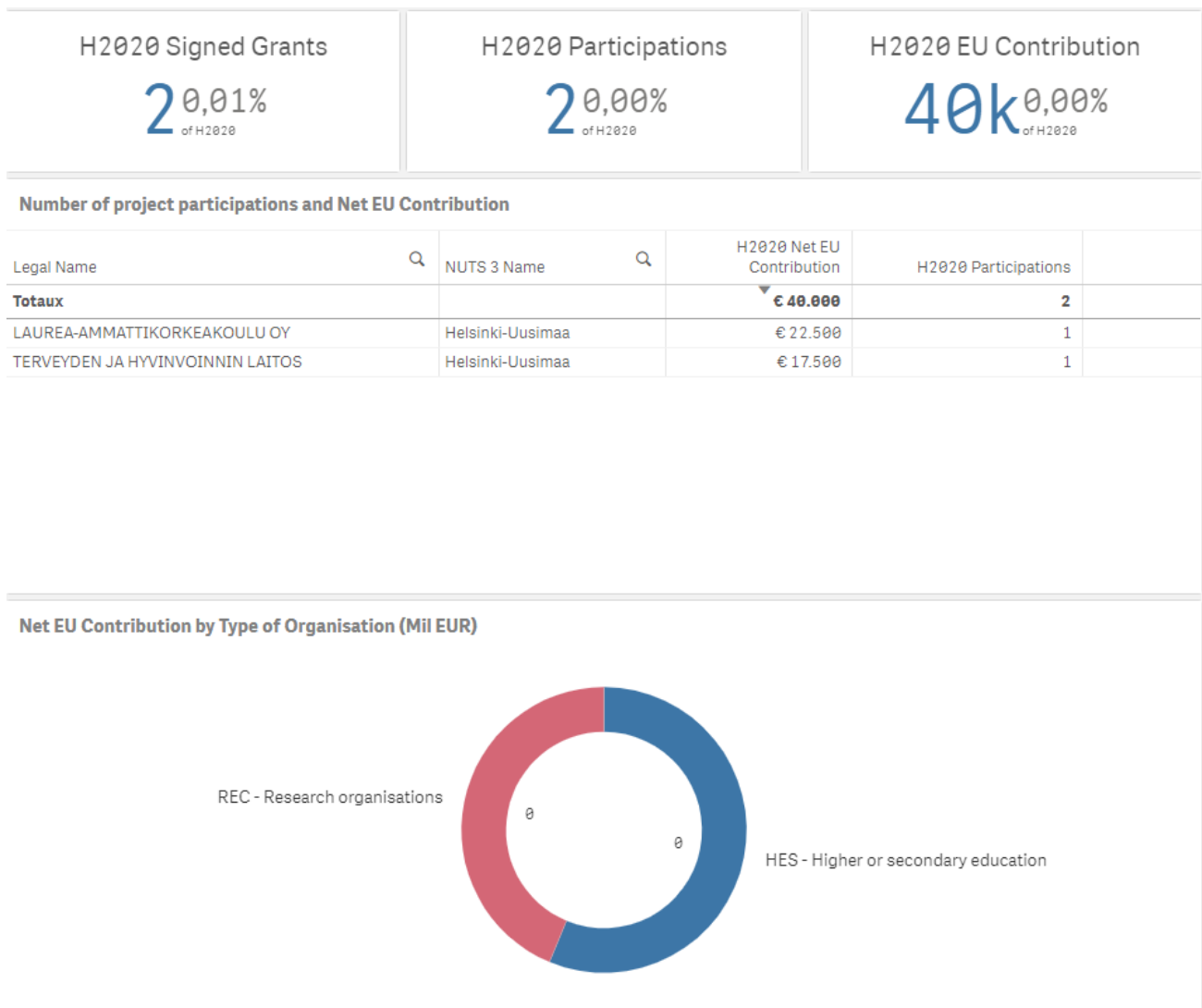
### Participants

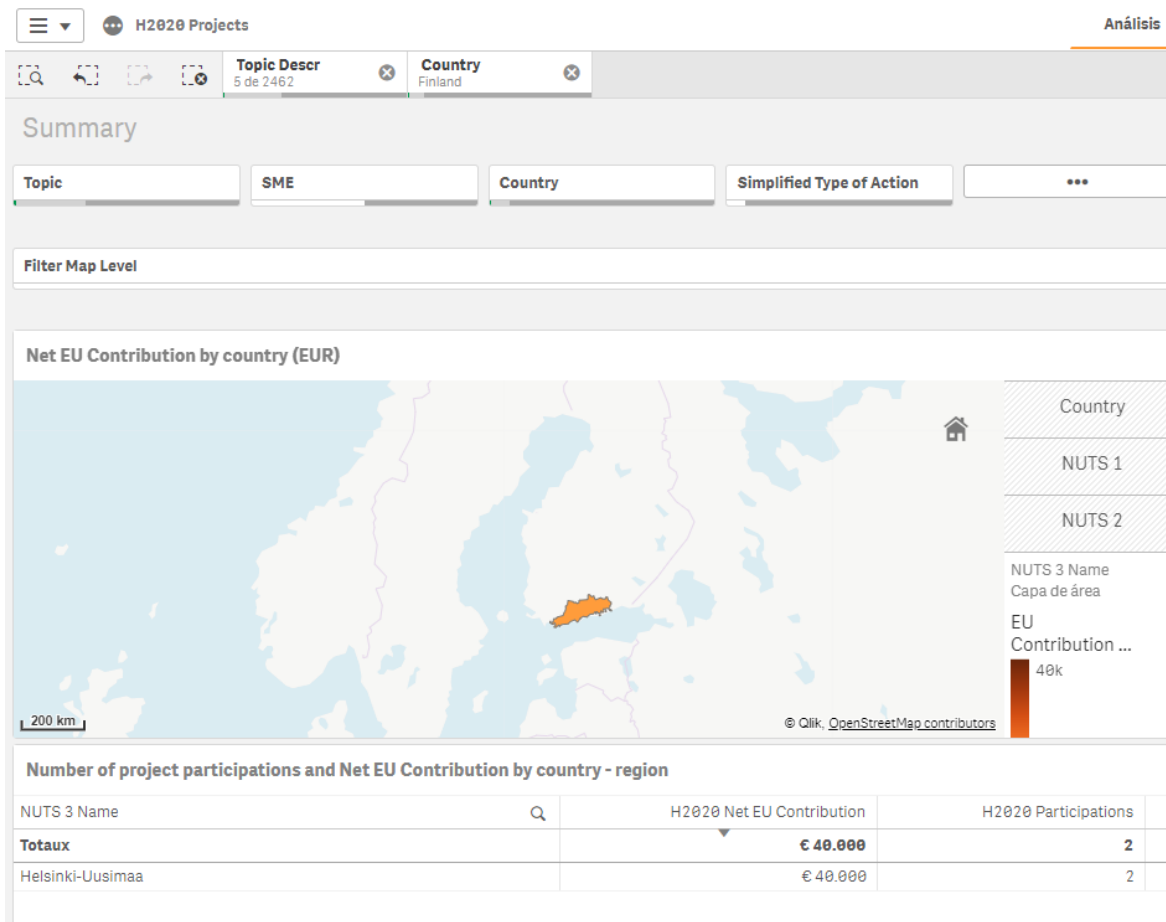
- INTEGRATING THE HEALTHCARE ENTERPRISE-EUROPE AISBL (Belgium)
- MEDCOM (Denmark)
- OFFIS EV (Germany)
- COMITE EUROPEEN DE COORDINATION DES INDUSTRIES RADIOLOGIQUES ELECTROMEDICALES ET D INFORMATIQUE DE SANTE AISBL (Belgium)
- AGENCE ESANTE - AGENCE NATIONALE DES INFORMATIONS PARTAGEES DANS LE DOMAINE DE LA SANTE GIE (Luxembourg)
- ARSENAL.IT - CENTRO VENETO RICERCAE INNOVAZIONE PER LA SANITA DIGITALE (Italy)
- AGENCE NATIONALE DES SYSTEMES D INFORMATION PARTAGES DE SANTE (France)
- CONTINUA HEALTH ALLIANCE PRIVATE STICHTING (Belgium)
- AZIENDA REGIONALE PER L'INNOVAZIONE E GLI ACQUISTI S.P.A. (Italy)
- FEDERATION EUROPEENNE DES HOPITAUX ET DES SOINS DE SANTE (Belgium)
- HRVATSKI ZAVOD ZA ZDRAVSTVENO OSIGURANJE (Croatia)
- ILEKTRONIKI DIAKYVERNISI KOINONIKISASFALISIS AE (Greece)
- STICHTING NATIONAAL ICT INSTITUUT IN DE ZORG (Netherlands)
- SPMS - SERVICOS PARTILHADOS DO MINISTERIO DA SAUDE EPE (Portugal)
- CENTRUM SYSTEMOW INFORMACYJNYCH OCHRONY ZDROWIA (Poland)



### 13. FINLAND E-HEALTH PROJECTS

In the period 2014-2019 a total of 2 proposals in CORDIS included a Finnish entity. And 2 were funded.





The 2 funded projects are listed below.

## 1. ASSESS CT - Assessing SNOMED CT for Large Scale eHealth Deployments in the EU

Project ID: 643818

From 2015-02-01 to 2016-07-31, closed project

### Project details

#### Objective

ASSESS CT will contribute to better semantic interoperability of eHealth services in Europe, in order to optimise care and to minimise harm in delivery of care. In a joint one-year effort, the ASSESS CT consortium will investigate the fitness of the clinical terminology SNOMED CT as a potential standard for EU-wide eHealth deployments, scrutinising clinical, technical, financial, and organisational aspects. Unbiased towards SNOMED CT adoption, the ASSESS CT project will employ established evaluation approaches from social science. It will scrutinise adoption against two alternative scenarios: to abstain from actions at the EU level, or to devise an EU-wide semantic interoperability framework without SNOMED CT. ASSESS CT will review the current state

of SNOMED CT through survey and focus group, regarding its use by IHTSDO members and the fulfilment of semantic interoperability use cases, the relationship with EU-wide recommendations, known technical and organizational drawbacks, and maintenance of the terminology. A series of studies using sampled clinical data will provide new evidence about conceptual and term coverage for selected languages, as well as technical fitness in manual and automated semantic annotation scenarios. The consortium will also analyse the impact of SNOMED CT adoption from a socio-economic viewpoint, encompassing management, business, organisational, and governance aspects. Validation of all working tasks, both political and domain-specific, will be secured through four large workshops with a list of distinguished experts assembled in an Expert Panel, Committee of MS Representatives, and national focus groups. Sufficient budget is reserved, also for coordination across the parallel H2020 Call PHC34 projects. Concrete strategy recommendations will be delivered to both MS, the EC, and SDOs about how SNOMED CT can scale up successful adoption and contribute to building a EU eHealth Interoperability Framework.

**Total cost:**

EUR 939 717

**EU contribution:**

EUR 939 717

**Coordinated in:**

Germany

**Topic(s):**

PHC-34-2014 - eHealth interoperability

**Funding scheme:**

CSA - Coordination and support Action

**Coordinator**

HOCHSCHULE NIEDERRHEIN (Germany)

**Participants**

- HL7 INTERNATIONAL FONDATION (Belgium)
- MEDIZINISCHE UNIVERSITÄT GRAZ (Austria)
- Averbis GmbH (Germany)
- EUROPEAN INSTITUTE FOR HEALTH RECORDS (France)
- EMPIRICA GESELLSCHAFT FÜR KOMMUNIKATIONS UND TECHNOLOGIEFORSCHUNG MBH (Germany)

- ACADEMISCH MEDISCH CENTRUM BIJ DE UNIVERSITEIT VAN AMSTERDAM (Netherlands)
- STICHTING NATIONAAL ICT INSTITUUT IN DE ZORG (Netherlands)
- REGIONE LOMBARDIA (Italy)
- AALBORG UNIVERSITET (Denmark)
- LINKOPINGS UNIVERSITET (Sweden)
- INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE (France)
- HRVATSKI ZAVOD ZA ZDRAVSTVENO OSIGURANJE (Croatia)
- TERVEYDEN JA HYVINVOINNIN LAITOS (Finland)

## 2. STARS - Empowering Patients by Professional Stress Avoidance and Recovery Services

Project ID: 727585

From 2017-01-01 to 2021-12-31, ongoing project

### Project details

#### Objective

##### Patient Empowerment

Individualized tackling of unnecessary stress, in particular when related to healthcare procedures, promises to enhance the autonomy and quality of life of many people and yield a significant contribution to self-empowerment, thus relieving careers and related persons from personal assistance. Not at least, also a considerable economic relief (see Impact).

This is the topic the STARS consortium is determined to deal with. Of course, as will be shown, the objective is complex and ambitious and has to meet challenges from smart vital signs measuring to wireless real-time transfer of large data amounts to big data management. Nevertheless, concerning the expectable positive impact there is a large potential of revenue for the efforts. And, regarding present technological progress, it seems absolutely feasible to face this challenge when doing this in by a concerted, multidisciplinary, cross-linked effort.

To achieve the aim, our proposal addresses an advanced, eHealth based concept for tailored avoidance and/or reduction of healthcare related stress, beginning as early as in the preclinical phase, proceeding during their hospitalisation until the end of the aftercare period. I.a. it can be expected that, recovery time will be shortened, harmful side-effects of sedating drugs will be prevented and costs will be reduced, which in sum will be an important contribution to a cost-effective healthcare system in the next decades.

#### Coordinator

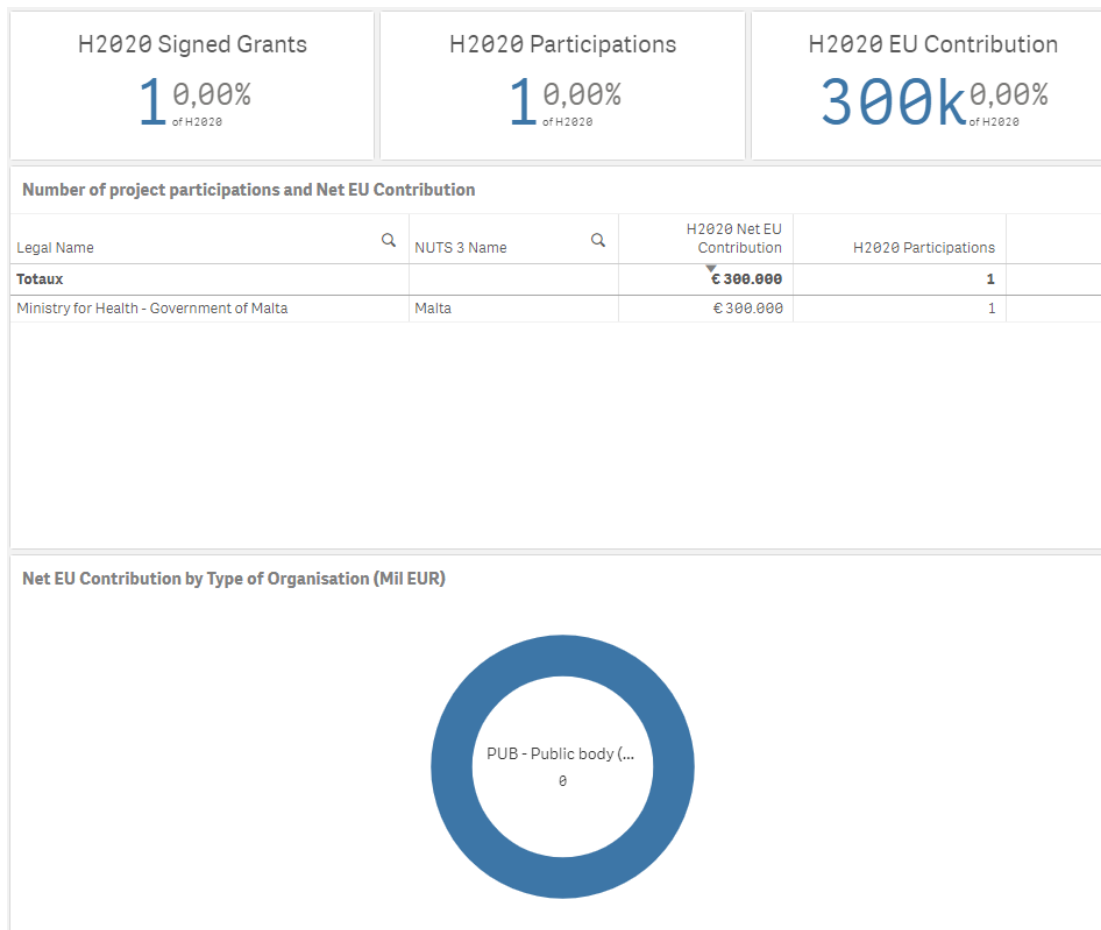
UNIVERSITEIT MAASTRICHT (Netherlands)

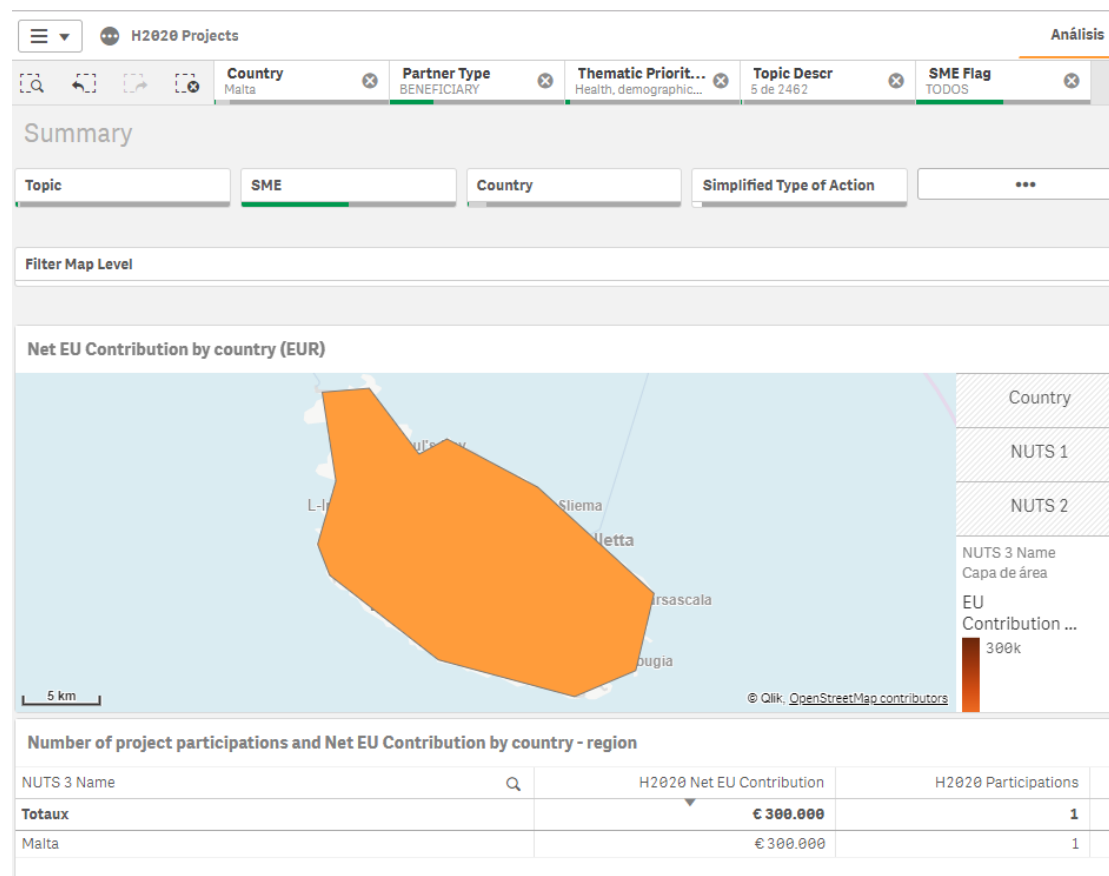
## Participants

- ISTITUTO NAZIONALE DI RIPOSO E CURA PER ANZIANI INRCA (Italy)
- ACADEMISCH ZIEKENHUIS MAASTRICHT (Netherlands)
- SERVICIO ANDALUZ DE SALUD (Spain)
- HOSPITAL SANT JOAN DE DÉU (Spain)
- FUNDACIO PARC TAULI (Spain)
- ETHNIKO KAI KAPODISTRIAKO PANEPISTIMIO ATHINON (Greece)
- BEDIN SARA (Italy)
- LAUREA-AMMATTIKORKEAKOULU OY (Finland)
- ZENIT ZENTRUM FÜR INNOVATION UND TECHNIK IN NORDRHEIN-WESTFALEN GMBH (Germany)
- AGENCIA DE QUALITAT I AVALUACIO SANITARIES DE CATALUNYA (Spain)

## 14. MALTA E-HEALTH PROJECTS

In the period 2014-2019 a total of 1 proposal in CORDIS included included a Maltese entity. And it was funded.





## EHW17 High Level eHealth Conference 2017

Project ID: 776127

From 2017-03-01 to 2017-06-30

### Project details

#### Objective

The Maltese Presidency proposes to organise a High-Level Conference on eHealth in keeping with the practice established by first-semester Presidencies since 2007.

The main objective will be to bring together high-level policymakers from all EU MS and other key stakeholders to discuss the most important current issues of common interest regarding the effective, safe and economic application of ICT to the planning, delivery and evaluation of health services. High-level delegates will be invited from all EU MS, Switzerland, Norway, Iceland & USA.

The Presidency will co-locate the event with a Health IT conference & exhibition organised by HIMSS Europe. Partnering with HIMSS will help reach a wider and more diverse audience, including key stakeholders from the health IT industry, allowing EU eHealth policies and the outcome of relevant EU-funded research and innovation to

reach a wider audience. The co-located events will be known collectively as “eHealth Week 2017” (EHW17).

The EHW17 programme will be both diverse and comprehensive, highlighting developments taking place in various aspects of eHealth such as legal, organisational, semantic and technical. The overarching theme of EHW17 is “Data for Health: the key to personalised sustainable care”. Subjects discussed will include:

- Patient access to and sharing of health data
- Moving health data safely onto cloud infrastructure
- Sharing personal health data across country borders
- Improving effectiveness, safety and privacy of mHealth
- Scaling up digital innovation for health and care
- International cooperation in eHealth
- Smart environments & integrated care
- Data management and analytics for personalised medicine & public health policy

EHW17 will include an Informal Working Lunch for high-level delegates, during which they will be invited to discuss the healthrelated aspects of the mid-term review of the Digital Single Market.

Both Presidency and Commission will have a stand on the exhibition floor.

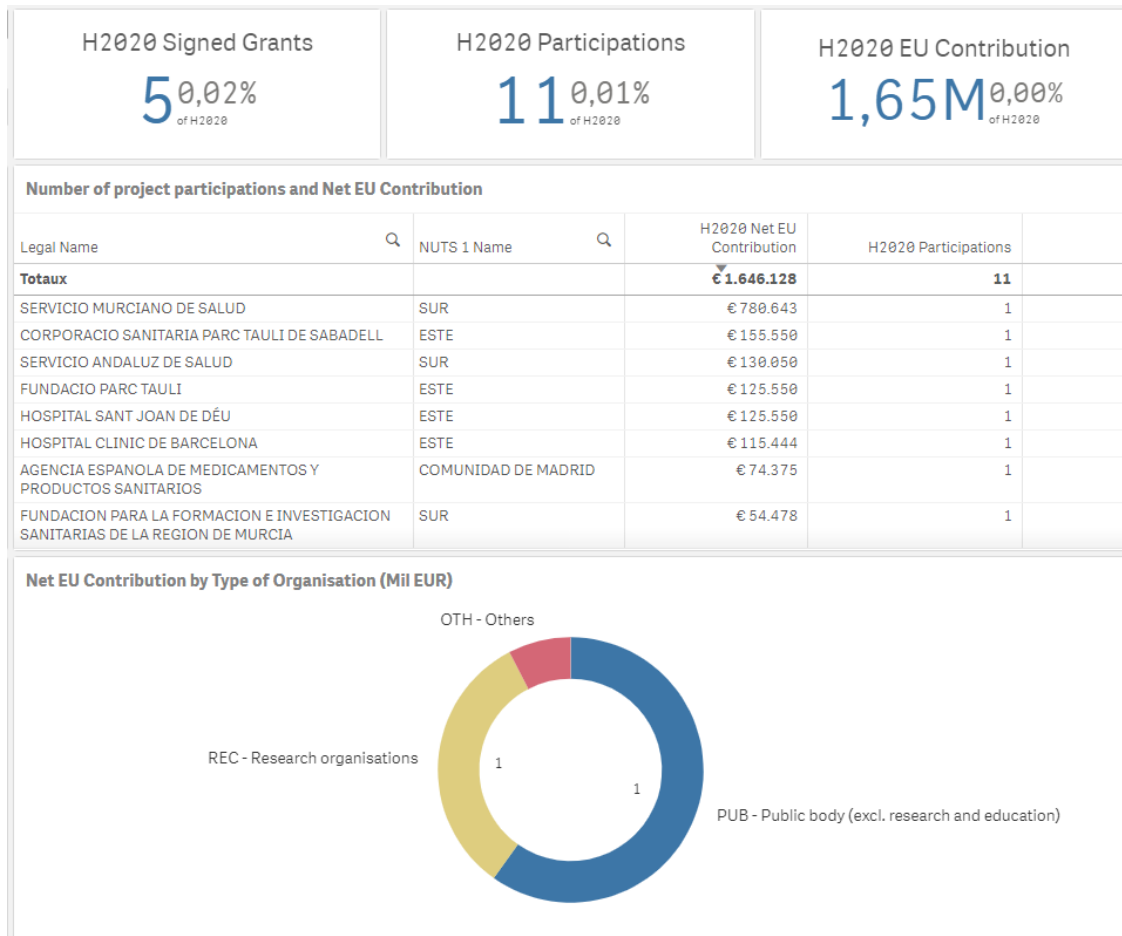
### **Coordinator**

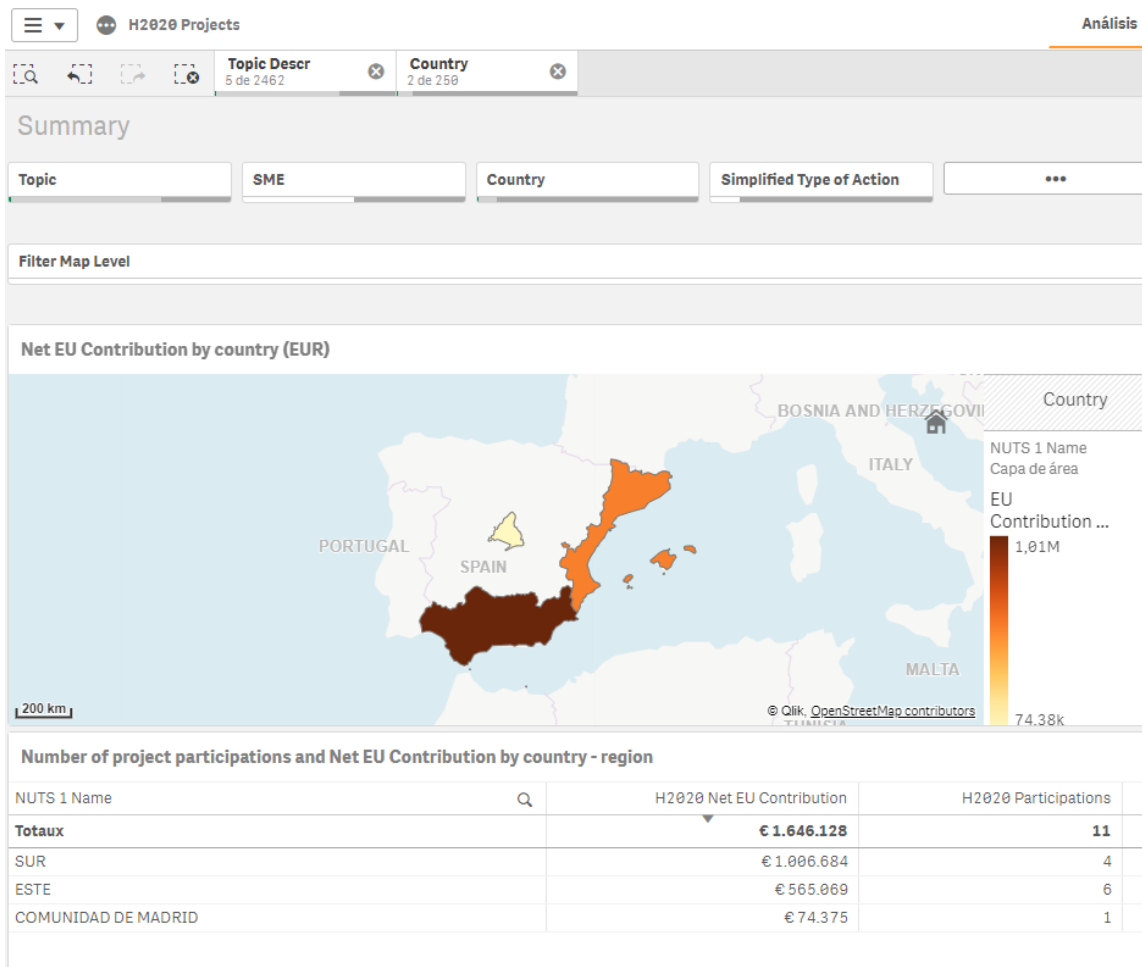
Ministry for Health - Government of Malta (Malta)



## 15. SPAIN E-HEALTH PROJECTS

In the period 2014-2019 a total of 11 proposals in CORDIS included a Spanish entity. But only 5 were funded.





## 1. STARS - Empowering Patients by Professional Stress Avoidance and Recovery Services

Project ID: 727585

From 2017-01-01 to 2021-12-31, ongoing project

### Project details

#### Objective

Patient Empowerment

Individualized tackling of unnecessary stress, in particular when related to healthcare procedures, promises to enhance the autonomy and quality of life of many people and yield a significant contribution to self-empowerment, thus relieving careers and related persons from personal assistance. Not at least, also a considerable economic relief (see Impact).

This is the topic the STARS consortium is determined to deal with. Of course, as will be shown, the objective is complex and ambitious and has to meet challenges from smart vital signs measuring to wireless real-time transfer of large data amounts to big data

management. Nevertheless, concerning the expectable positive impact there is a large potential of revenue for the efforts. And, regarding present technological progress, it seems absolutely feasible to face this challenge when doing this in by a concerted, multidisciplinary, cross-linked effort.

To achieve the aim, our proposal addresses an advanced, eHealth based concept for tailored avoidance and/or reduction of healthcare related stress, beginning as early as in the preclinical phase, proceeding during their hospitalisation until the end of the aftercare period. I.a. it can be expected that, recovery time will be shortened, harmful side-effects of sedating drugs will be prevented and costs will be reduced, which in sum will be an important contribution to a cost-effective healthcare system in the next decades.

### Coordinator

UNIVERSITEIT MAASTRICHT (Netherlands)

### Participants

- ISTITUTO NAZIONALE DI RIPOSO E CURA PER ANZIANI INRCA (Italy)
- ACADEMISCH ZIEKENHUIS MAASTRICHT (Netherlands)
- SERVICIO ANDALUZ DE SALUD (Spain)
- HOSPITAL SANT JOAN DE DÉU (Spain)
- FUNDACIO PARC TAULI (Spain)
- ETHNIKO KAI KAPODISTIRIAKO PANEPISTIMIO ATHINON (Greece)
- BEDIN SARA (Italy)
- LAUREA-AMMATTIKORKEAKOULU OY (Finland)
- ZENIT ZENTRUM FÜR INNOVATION UND TECHNIK IN NORDRHEIN-WESTFALEN GMBH (Germany)
- AGENCIA DE QUALITAT I AVALUACIO SANITÀRIES DE CATALUNYA (Spain)

## 2. openMedicine

Project ID: 643796

From 2015-01-01 to 2016-12-31

### Project details

#### Objective

The CSA will enhance the safety of cross-border healthcare through interoperable ePrescriptions. epSOS solved the message transfer problem, but encountered 2 serious “delivery” problems: the univocal identification of medicinal products (MPs) dispensed abroad, and substitution challenges.

Global SDOs (WHO, HL7, IHTSDO, ISO/CEN, GS1), EU regulatory agencies (EMA), MS Competent Authorities, major stakeholders (industry, health professionals, patients) harmonise their related efforts to deliver

- common data models - expanding upon epSOS and existing standards (ISO/IDMP) - for prescribed MPs
- a common meta-vocabulary for unambiguous definition, description, and identification of MPs
- rules to harmonise practices of therapeutic and economic substitution
- a roadmap for post-project actions and implementations
- policy recommendations for the EU-USA road mapping process (MoU)

Work will link to related research & innovation activities of SDOs, epSOS, policy and regulatory processes (eHealth Network), the three other PHC34 projects.

WP1 develops a concise conceptual framework, including use case scenarios where the identification of a MP is an issue, including pharmacological and pharmacokinetic attributes, clinical indications and risks. WPs 2 address the identification and description of the pharmaceutical products, considering implementability as essential. WP3 investigates the situation in MSs with respect to substitution, and explores options for substitution. Each track develops a set of concrete solutions and road map recommendations, validated by experts in F2F meetings and workshops in WP4. Fostering exploitation by MS regulatory agencies and communication of results is the duty of WP5.

The project involves national competent authorities, SDOs and stakeholders not part of the core team at an early stage to assure the practicability, acceptance and trust in the solutions developed.

The CSA lasts 2 years involving 8 beneficiaries and about 25 expert organisations.

### Coordinator

EMPIRICA GESELLSCHAFT FÜR KOMMUNIKATIONS UND TECHNOLOGIEFORSCHUNG  
MBH (Germany)

### Participants

- CUSTODIX NV (Belgium)
- HEALTH PRODUCTS REGULATORY AUTHORITY (Ireland)
- REGIONE LOMBARDIA (Italy)
- HL7 INTERNATIONAL FOUNDATION (Belgium)
- SIEC BADAWCZA LUKASIEWICZ INSTYTUT LOGISTYKI I MAGAZYNOWANIA (Poland)
- STICHTING KONINKLIJK NEDERLANDS NORMALISATIE INSTITUUT (Netherlands)
- AGENCIA ESPAÑOLA DE MEDICAMENTOS Y PRODUCTOS SANITARIOS (Spain)

### 3. THALEA II - Telemonitoring and Telemedicine for Hospitals Assisted by ICT for Life saving co-morbid patients in Europe As part of a Patient personalised care program of the EU

Project ID: 689041

From 2016-06-01 to 2019-05-31, closed project

#### Project details

##### Objective

Public procurement of innovative solutions (PPI) shortens the route to market, sets free the potential of early adopters to implement an innovation and enables public procurers to efficiently answer market demands of innovative products.

THALEA II is the first follow-up PPI in healthcare for Intensive Care Units (ICU). It will bring an innovative product to the European healthcare market aiming to mitigate negative impacts of one of the greatest European socio-economic challenges of the 21st century in healthcare: Ageing of society and workforce. This development challenges the healthcare sector, due to an imbalance between the increasing number of EU-citizens requiring care and the decreasing number of human resources on the caregiving side. Thus, there is an urgent need for innovative solutions disburdening healthcare professionals. There is evidence suggesting that telemedicine has the ability to mitigate these problematic pan-European challenges.

The promising technology of THALEA II will be implemented helping to save more lives and as a result increasing patients' quality of life. This project will create the potential to increase European competitiveness and exceed research and development in comparison to the US and demonstrate the effectiveness of this approach with respect to innovative management and procurement methods.

THALEA PCP is currently creating an appropriate solution fulfilling all demands of a telemedical research framework with a special focus on interoperability and scalability. THALEA addresses the need for a marketable, advanced solution applicable on a broad basis, avoiding vendor lock-in. Using the PPI-funding instrument, procuring entities and ICU experts will be able to buy the advanced THALEA solution developed during PCP. Thereby, this promising technology will be spread all over Europe assisting caregivers in all sectors of care and consequently improving the quality of life and wellbeing of many EU citizens.

##### Coordinator

UNIVERSITAETSKLINIKUM AACHEN (Germany)

##### Participants

- ACADEMISCH ZIEKENHUIS MAASTRICHT (Netherlands)
- CORPORACIO SANITARIA PARC TAULI DE SABADELL (Spain)

- AGENCIA DE QUALITAT I AVALUACIO SANITARIES DE CATALUNYA (Spain)
- MINISTERIE VAN ECONOMISCHE ZAKEN EN KLIMAAT Participation ended (Netherlands)
- BUNDESBESCHAFFUNG GMBH (Austria)

#### **4. LIVE INCITE - Lifestyle intervention in the perioperative process through digital service**

**Project ID:** 727558

**From** 2016-11-01 **to** 2020-08-31, ongoing project

##### **Project details**

##### **Objective**

Lifestyle factors of the patient (e.g. smoking, hazardous alcohol drinking and malnutrition) are proven to be independent risk factors negatively impacting health outcome in the perioperative process. Evidence suggests that the implementation of intensive lifestyle intervention programs can significantly reduce the post-surgery complication risk and rehabilitation time.

However, implementation of and compliance to such programs are today poor. In addition, possibilities to optimize the patients' mental and physical state throughout the perioperative process are insufficient.

LIVE INCITE aims to move beyond the current state of general information being provided about risks and post-surgery activities, to translating statistics and data to individual-specific information, making the individual plan "real" for the patient.

We believe it is possible to leverage f i existing and new data, best practice behavioral change concepts, intuitive and easy-touse user experience, modern communication and collaboration channels to integrate not only patients and care providers but also the patient's family and friends, and new technology for continuous monitoring of and feedback on patient activities

related to her defined plan. But, no matter which concepts and solutions the market will suggest, sustainability and scalability (related to the likely changing needs and pre-requisites of the specific procurer as well as the dissemination in and uptake from a European-wide procurer community) has to be enforced through principles related to interoperability, open architecture, and use of international standards.

Through its consortia including specialized care hospitals, academia, patient organizations as well as collaboration and innovation platforms the project has the critical mass of knowledge to reach a truly innovative solution together with the supply side.

##### **Coordinator**

STOCKHOLMS LANS LANDSTING (Sweden)

##### **Participants**

- REGION HOVEDSTADEN (Denmark)

- HOSPITAL CLINIC DE BARCELONA (Spain)
- HOSPITAL CLINICO Y PROVINCIAL DE BARCELONA (Spain)
- KAROLINSKA INSTITUTET (Sweden)

## **5. ProEmpower - Procuring innovative ICT for patient empowerment and self-management for type 2 diabetes mellitus**

**Project ID:** 727409

**From** 2016-10-01 **to** 2020-03-31, ongoing project

### **Project details**

#### **Objective**

Public procurers in ProEmpower aim to procure a disease self-management solution to help meet the imminent threat of a diabetes epidemic. ProEmpower will make person-centred care reality - giving the patient the steering wheel - for optimal health outcomes. Very significant synergies will be reaped by supporting all 10 action areas of diabetes management in an integrated ICT solution. Early detection, personal decision support, self management and peer support are to be delivered from a platform with full interoperable and secure access to the necessary devices and health records. ProEmpower will apply the internationally acclaimed Chronic Care Model to specify support needs for type 2 diabetes at all stages. Self-management and treatment will be supported by personalised guidelines and making the best use of clinical data. In this way a quality culture in healthcare will be fostered and learning healthcare systems made reality.

Suppliers will be rigorously evaluated after each of the four procurement phases, comprising (I) an open market consultation supported by the European eHealth Competition, (II) specification of architecture and system aligned to requirements of patients, peers and providers, (III) prototype development and testing with end-users and (IV) effectiveness proven in a trial with 200 patients and 40 professionals.

Fully rolled out in the four countries, enabled by procurers with the authority and capacity in their countries and regions, ProEmpower will serve 12 million diabetes patients.

Reductions in diabetes-related death, amputation, blindness and renal failure promise cost relief of € 53 billion over 7 years in the four countries. Suppliers can expect a turnover of € 5 billion a year. Proven ability to cover the four different health systems promises ProEmpower suppliers easy entry into other EU markets and beyond, a very strong contribution to overcoming fragmentation of demand and fostering the global market.

#### **Coordinator**

Türkiye Cumhuriyeti Sağlık Bakanlığı (Turkey)

#### **Participants**

- SPMS - SERVICOS PARTILHADOS DO MINISTERIO DA SAUDE EPE (Portugal)
- IRMANDADE DA SANTA CASA DA MISERICORDIA DA AMADORA IPSS (Portugal)
- SERVICIO MURCIANO DE SALUD (Spain)
- FUNDACION PARA LA FORMACION E INVESTIGACION SANITARIAS DE LA REGION DE MURCIA (Spain)
- CENTER FOR PROTECTION OF THE RIGHTS IN THE HEALTHCARE SDRUZHENIE (Bulgaria)
- TICBIOMED TECNOLOGIAS DE LA INFORMACION PARA LA SALUD EN LA REGION DE MURCIA (Spain)
- EMPIRICA GESELLSCHAFT FUR KOMMUNIKATIONS UND TECHNOLOGIEFORSCHUNG MBH (Germany)
- AZIENDA OSPEDALIERA UNIVERSITARIA FEDERICO II (Italy)
- UNIVERSITA DEGLI STUDI DI SALERNO (Italy)
- SOCIETA' REGIONALE PER LA SANITA' SPA (Italy)



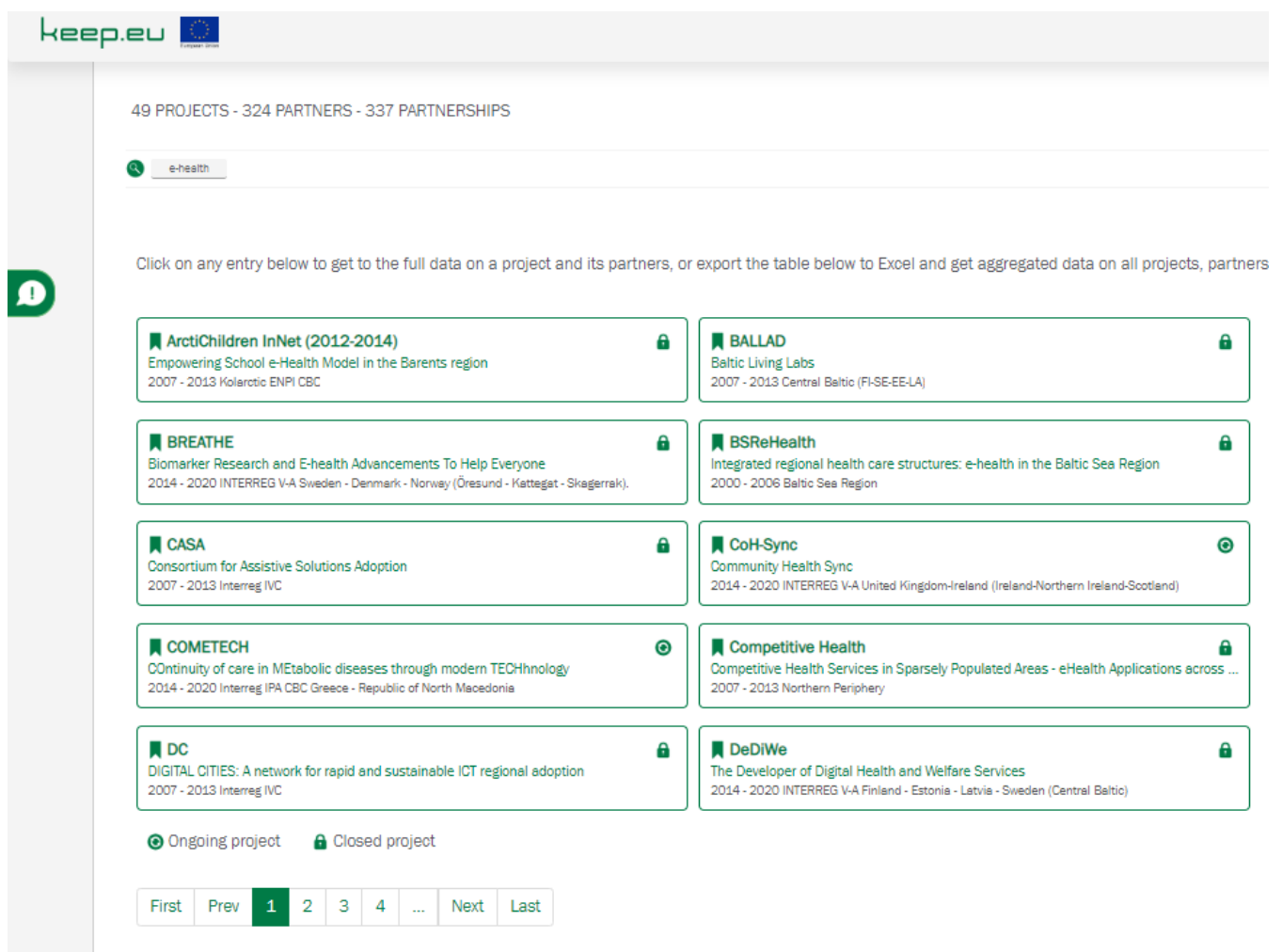
## 16. INTERREG EUROPE PROJECTS

In a first overview of all funded projects recovered by a search in KEEP.EU <https://www.keep.eu/> that is a reliable source of data on these projects, since it is all provided by the programmes themselves or, in the case with macro-regional strategies, by their thematic authorities.

Using the criteria below we can find the projects that we are looking for. We have the possibility to use a word or sentence to quick search data in keep.eu, apply thematic search, limit search to specific periods.

For a more thorough search, [go to Projects section](#). Every search result produces thorough data for each project. Aggregated data on many different projects can be exported to Excel for our convenience.

Using this tool with the “e-Health” tag a total of a total of 49 projects and 324 partners were found

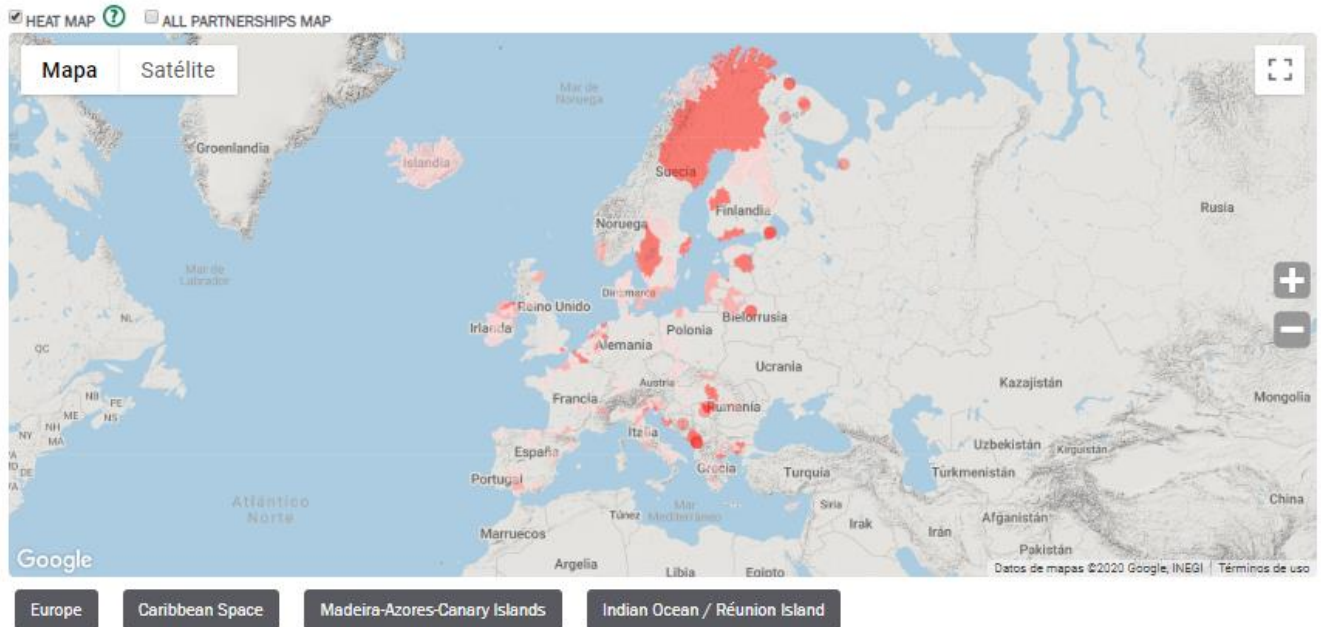


The screenshot shows the keep.eu website interface. At the top, the keep.eu logo and European Union flag are visible. Below the header, a search bar contains the text 'e-health'. The results show '49 PROJECTS - 324 PARTNERS - 337 PARTNERSHIPS'. A list of project cards is displayed, each with a title, description, and dates. The projects listed are:

- ArctiChildren InNet (2012-2014)**: Empowering School e-Health Model in the Barents region. 2007 - 2013 Kolarctic ENPI CBC.
- BALLAD**: Baltic Living Labs. 2007 - 2013 Central Baltic (FI-SE-EE-LA).
- BREATHE**: Biomarker Research and E-health Advancements To Help Everyone. 2014 - 2020 INTERREG V-A Sweden - Denmark - Norway (Öresund - Kattegat - Skagerrak).
- BSReHealth**: Integrated regional health care structures: e-health in the Baltic Sea Region. 2000 - 2006 Baltic Sea Region.
- CASA**: Consortium for Assistive Solutions Adoption. 2007 - 2013 Interreg IVC.
- CoH-Sync**: Community Health Sync. 2014 - 2020 INTERREG V-A United Kingdom-Ireland (Ireland-Northern Ireland-Scotland).
- COMETECH**: Continuity of care in MEtabolic diseases through modern TECHnology. 2014 - 2020 Interreg IPA CBC Greece - Republic of North Macedonia.
- Competitive Health**: Competitive Health Services in Sparsely Populated Areas - eHealth Applications across ... 2007 - 2013 Northern Periphery.
- DC**: DIGITAL CITIES: A network for rapid and sustainable ICT regional adoption. 2007 - 2013 Interreg IVC.
- DeDiWe**: The Developer of Digital Health and Welfare Services. 2014 - 2020 INTERREG V-A Finland - Estonia - Latvia - Sweden (Central Baltic).

At the bottom, there is a legend for 'Ongoing project' (green circle) and 'Closed project' (grey circle). A pagination bar shows 'First', 'Prev', '1' (selected), '2', '3', '4', '...', 'Next', and 'Last'.

In the heat map we can check that **INTENCIVE** countries are moderate successfull in relation to other countries regarding the number of funded projects in which participate.



## 17. OVERALL INTENCIVE COUNTRY PROJECTS

### 17.1. Analysis by country and institution

A search for collaborative projects in KEEP.EU focused on e-Health with the tags TOPIC: (e-Health) AND ADDRESS: (France OR Hungary OR Finland OR Spain OR Malta) in the last 5 years (INTERREG EUROPE 2014-2020) has yield 3 funded projects.

Search for data on Interreg, Interreg IPA CBC and ENI CBC

PROJECTS PROGRAMMES PARTNERS COUNTRIES & REGIONS STATISTICS REPRESENTATIVENESS

Home / Projects

## Search for Projects

Use the form below to search for projects. If you export the search results to Excel you will get all the aggregated data for all projects, partners and calls meeting your criteria. Use this if you want to manipulate complex quantitative data (eg sum up budget data, average it out per project, etc) or even to collect large extents of qualitative data (results, etc).

Please also check how representative keep.eu is.

MODIFY SEARCH ▾

3 PROJECTS - 22 PARTNERS - 22 PARTNERSHIPS

[Go to partners map](#)

2014 - 2020 Interreg Europe SUOMI / FINLAND ESPAÑA БЪЛГАРИЯ (BULGARIA) MALTA FRANCE e-health

DOWNLOAD MAP IMAGE

EXPORT PROJECTS TO EXCEL

GET RESULTS URL

NEW SEARCH

Click on any entry below to get to the full data on a project and its partners, or export the table below to Excel and get aggregated data on all projects, partners and calls.

### INTENCIVE

INnovation and Technology ENhancing Customer Oriented Health SerVICes  
2014 - 2020 Interreg Europe


### SILVER SMEs

Identification and Implementation of Regional Policies to take advantage of the SILVER Economy derived opportunities to engage S...  
2014 - 2020 Interreg Europe

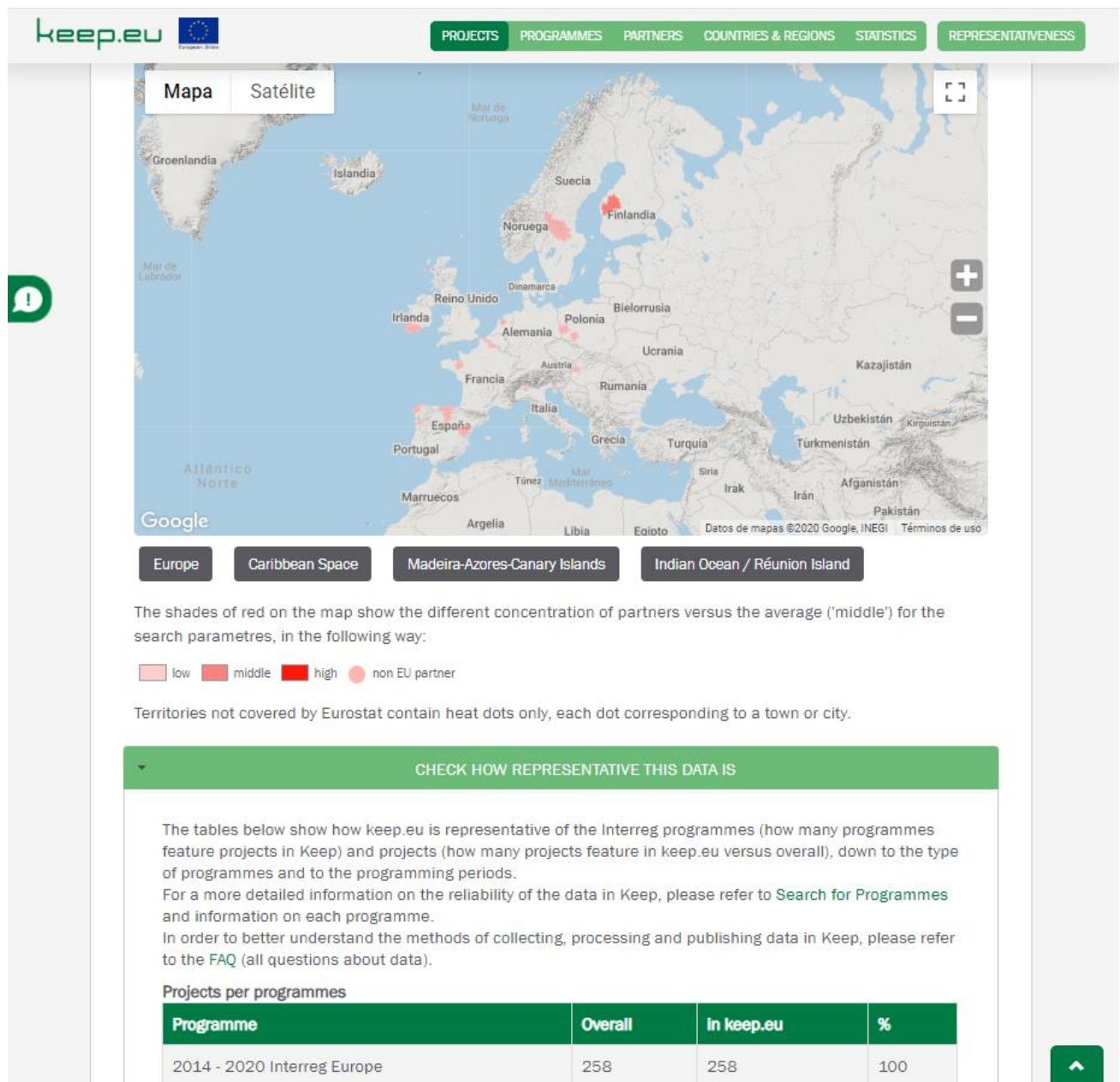
### TITTAN

Network for Technology, Innovation and Translation in Ageing.  
2014 - 2020 Interreg Europe

 Ongoing project

 Closed project

Regarding the EU contribution in the INTENCIVE country partners, the following map shows the most active countries



Number of entities from Intencive countries that participates in e-Health projects under the INTERREG EUROPE programme

Country	Number of partners
Spain	4
France	3

Finland	2
Hungary	1
Malta	1

The institutions that have been funded under the INTERREG EUROPE 2014-2020 in the e-Health Topic are reflected in the table ordered by Country

Institutions	Country
Provincial Government of Teruel	Spain
Basque Foundation for Health Research and Innovation (BIOEF)	Spain
VALDECILLA BIOMEDICAL RESEARCH INSTITUTE	Spain
Society for the Development of the Province of Burgos (SODEBUR)	Spain
EUROMONTANA	France
ID2Santé, Innovation and development of the healthcare sector in Bretagne	France
Eurasanté EEIG	France
Ministry for Gozo	Malta
Pannon Business Network Association	Hungary
Regional Council of South Ostrobothnia	Finland
Seinäjäski University of Applied Sciences	Finland

The distribution of the institutions by country is as follows: Spain: 4, Finland: 2, France: 3, Malta: 1, Hungary: 1

The list of the 2014-20 funded projects with title, acronym, thema, budget and dates with the participation of at least one of the **Intencive** countries is as follows:

Project Acronym	Project Title	Thema	EU Contribution	Dates
TITTAN	Network for Technology, Innovation and Translation in Ageing.	Innovation capacity and awareness-raising New products and services Health and social services	€ 1.386.780,80	2016/04/01 – 2019/09/30
SILVER SMEs	Identification and Implementation of Regional Policies to take advantage of the SILVER	Health and social services SME and entrepreneurship	€ 1.575.278,90	2018/06/01 – 2023/05/31

	Economy derived opportunities to engage SMEs in growth and entrepreneurship spirit	Social inclusion and equal opportunities		
INTENCIVE	INnovation and Technology ENhancing Customer Oriented Health SerVicEs	Health and social services	€ 842.766,50	2019/08/01 – 2023/01/31

## 17.2. Analysis by country and institution e-Health International projects

The list of funded e-Health projects with Intencive countries as partners is below:

Project Acronym	Project Title	H2020 EU Contribution	Country	Entity
TITTAN	Network for Technology, Innovation and Translation in Ageing.	€ 1.386.780,80	Spain	<ul style="list-style-type: none"> <li>Galician Health Knowledge Agency (ACIS) (Spain)</li> <li>Basque Foundation for Health Research and Innovation (BIOEF) (Spain)</li> </ul>
SILVER SMEs	identification and Implementation of Regional Policies to take advantage of the SILVER Economy derived opportunities to engage SMEs in growth and entrepreneurship spirit	€ 1.575.278,90	Spain France	<ul style="list-style-type: none"> <li>Provincial Government of Teruel (Spain)</li> <li>Society for the Development of the Province of Burgos (SODEBUR) (Spain)</li> <li>Eurasanté EEIG (France)</li> <li>EUROMONTANA (France)</li> </ul>
INTENCIVE	INnovation and Technology ENhancing Customer Oriented Health SerVicEs	€ 842.766,50	Finland Spain France Hungary Malta	<ul style="list-style-type: none"> <li>Regional Council of South of Ostrobothnia (Finland)</li> <li>Pannon Business Network Association (Hungary)</li> <li>Ministry for Gozo (Malta)</li> <li>Valdecilla Biomedical Research Institute (Spain)</li> <li>ID2Santé, Innovation and development of the healthcare sector in Bretagne (France)</li> <li>Seinäjäki University of Applied Sciences (Finland)</li> </ul>

### 17.3 TITTAN PROJECT

**Project Title:** Network for Technology, Innovation and Translation in Ageing

**Acronym:** TITTAN

**From** 2016-014-01 **to** 2020-09-30, ongoing project

**Budget:** EUR 1.692.182,00

**European Union funding:** EUR 1.386.780,80

**Web:** <http://www.interregeurope.eu/TITTAN>

#### Project details

##### Description

European population is ageing rapidly. The number of people aged 65 and over is projected to increase from 14% in 2010 to 25% in 2050. Advances in science and technology contribute to prolong people lifespan, but unfortunately that does not mean they will be healthier. In its headline strategic document “EU2020 Strategy”, the EC has identified active and healthy ageing as a major societal challenge common to all European Countries. The TITTAN project (Network for Technology, Innovation and Translation in Ageing) aims to tackle that challenge, by improving the quality and performance of the European regional healthcare systems in relation with the healthy and active ageing. Its specific objective is to exchange, benchmark and implement good practices and measures in 7 European regions about policies which can foster the design, up-taking and use of innovative technology-based products/solutions. The TITTAN learning approach is focused on 3 Thematic Areas (TAs): how to uptake innovative health products/services through new public procurement practices (PCP and PPI); how to promote the establishment of innovation ecosystems in the health sector; how to raise citizen’s awareness about using new technologies for improving quality of life. The project is promoted by a well-balanced partnership, which involves 7 European regions: Galicia (lead partner), Basque Country, Scotland, the Metropolitan Area of Amsterdam, Lombardy, Saxony and Lower Silesia. The strong ties among them - coming from the cooperation in previous projects and the active participation in the EIP-Active and Healthy Ageing – represents an added-value for the partnership. TITTAN will contribute to improve 7 regional policy instruments. all of them are linked to the EU Structural Funds. Thus, TITTAN will provide partner regions with the opportunity to orientate the spending process of the Structural Funds towards some of the most-effective and result-oriented policy practices for healthy and active ageing.

##### Expected results

The project overall objective is to improve the quality and performance of the European regional healthcare systems in relation with the providing of products and services for a healthy and active ageing. The TITTAN specific objective is to exchange and implement good practices and knowledge among European regions about the development of policies aiming to foster the design, uptaking and use of innovative technology-based products and solutions for a healthy and active ageing. The project focuses on three



Thematic Areas (TA): TA1.Outside-In Technological Innovation:to promote the acquisition of innovative products and solutions for public healthcare systems,mainly through the implementation of innovative procurement practices, such as Pre-commercial Procurement (PCP) and Public Procurement of Innovative Solutions (PPI),but also through the analysis of other approaches. TA2.Inside-Out Technological Innovation:to reduce the gap between research and market in the health sector, by promoting the establishment of innovation ecosystems, based on the quadruple-helix approach (public bodies-research-industry-communities).Ecosystems should promote the transfer of translational research results to companies and boost the developing of new products and services. TA3.Active Citizens for Healthy Ageing:to raise citizen's awareness and knowledge about using new technologies for improving quality of life, through the adoption of e-health practices and the patients involvement in co-design experiences with health professionals and caregivers. The direct target-group of the project includes regional/local authorities in charge of policies design and implementation in the field of healthy active ageing and others regional stakeholders involved in the decision-making process, such as research centres, universities and private company clusters.The project will also benefit indirectly to the citizens of the regions involved,especially elderly people and patients with chronic illness.

### Expected outputs

The TITTAN project will contribute to improve regional policy instruments in relation to the field of healthy and active ageing. All the policy instruments addressed by the project are linked to the implementation of 2014-2020 EU Structural Funds, in particular the ERDF. TITTAN will therefore have a strong impact on that implementation process, in the sense of ensuring a quality-oriented and effective investment of Structural Funds in the field of healthy and active ageing. The improvement of policy instruments will be achieved through two complementary ways: - the improvement of ongoing plans and projects, by introducing measures identified thanks to the TITTAN project; - the implementation of new projects and plans, inspired in the experiences shared in the framework of the TITTAN project. The expected specific results for each of the three project Thematic Areas will be the following :

- For TA1. R.1.1. Identified 8 good practices and implemented 4 measures , for promoting PCP and PPI in the field of healthy and active ageing. R.1.2. Established an Interregional Buyers' Group, involving at least 4 out the 7 TITTAN regions. R.1.3. Identified 14 good practices and implemented 7 measures , for the uptaking of innovative solutions by the public administrations, through a direct collaborative dialogue with companies.
- For TA2. R.2.3. Identified 14 good practices and implemented 7 measures , fostering the development of health innovation ecosystems, based on a permanent collaboration among public administrations, research, industry and communities (four-helix approach). R.2.1. Identified 14 good practices and implemented 7 measures, promoting the matching of researchers and investors/buyers and the establishment of a common Interregional Portfolio of



research results within the TITTAN project, to be promoted at international level. R.2.2. Identified 14 good practices and implemented 7 measures, fostering entrepreneurship culture among health professionals and generating secondary services companies - start-up, technology based companies (TBCs) – in the active ageing field.

- For TA3. R.3.1. Identified 14 good practices and implemented 7 measures, promoting e-health practices and the use of new devices for a healthy living. R.3.2. Identified 14 good practices and implemented 7 measures, stimulating co-design and co-creation practices, with the aim of involving final users in e-health experiences. The TITTAN project is expected to involve around 40 regional Stakeholders. Some of the TITTAN expected results will be interregional, such as the establishment of a public Buyers' Group or the creation of a common Interregional Portfolio of research results. Moreover, TITTAN will increase the cooperation between bordering regions – Saxony and Lower Silesia – and regions of the same Country – Galicia and Basque Country. For that reason, during the project implementation the opportunity of developing interregional Action Plans will be taken into account.

### Coordinator

Galician Health Knowledge Agency (ACIS) (Spain)

### Participants

- Regional Foundation for Biomedical Research (FRRB) (Italy)
- Healthy Saxony (HS) (Germany)
- The University of Strathclyde - Digital Health & Care Institute (DHI) (United Kingdom)
- Lower Silesian Voivodeship Marshal Office (LSVMO) (Poland)
- City of Almere (CAL) (Netherlands)
- Basque Foundation for Health Research and Innovation (BIOEF) (Spain)

## 17.4 SILVER SMEs PROJECT

**Project Title:** Identification and Implementation of Regional Policies to take advantage of the SILVER Economy derived opportunities to engage SMEs in growth and entrepreneurship spirit

**Acronym:** SILVER SMEs

**From** 2018-06-01 **to** 2023-05-31, ongoing project

**Budget:** EUR 1.868.484,00

**European Union funding:** EUR 1.575.278,90

**Web:** <http://www.interregeurope.eu/SILVERSMES>

### Project details

#### Description

The strategic objective of SILVER SMEs is to improve the implementation and delivery of Regional Policies for SMEs competitiveness by building on significant opportunities arising from the Silver Economy (SE). The SE can be defined as the economic opportunities arising from the public and consumer expenditure related to population ageing and the specific needs of the population. In the framework of the project, partners will focus on the opportunities for the development of SMEs to produce goods and products for the retired population (from 62yrs onwards), especially for those living in peripheral and rural areas. Phase 1 will be executed over 36 months: the first 2 years dedicated to the exchange of policy experience, and the last year focused on the adoption of measures & preparation of the Action Plans. The key result of the project will be to build the engagements of SMEs in the SE, develop initiatives and pro-active public policies, designed to enable strategic investments. These investments will be aimed at promoting the development of SMES that would benefit from these fast developing market opportunities, in areas of products and services supporting active ageing, good health, social inclusion and independence. Among the key outputs will be:

- 8 regional SWOT & 1 Composite interregional SWOT analysis.
- International Benchmark and Identification of 60 Good Practices covering both, subgroups of the ageing society (Healthy-Wealthy/Vulnerable/Dependent) and, transversally, key selected economic subsectors of the SE (Housing/Health-Wellbeing/Robotic & ICT).
- Peer-Review and selection of 18 Best Practices.
- 8 Action Plans to improve 8 ERDF OPs linked to the support of SMEs.
- 6 Interregional study visits & in parallel 3 Interregional Workshops & 1 Seminar. The workshop will cover "Markets and policy instruments towards opportunities derived from the mentioned GPs" and the Seminar "Senior Tourism & Accessibility".
- 96 Regional Stakeholders group meetings.

### Expected results

The general objective of SILVER SMEs is to improve the implementation of Regional Policies for SMEs competitiveness by taking better advantage of opportunities derived from the Silver Economy. Among the derived sub-objectives, through the development of the SE and support of SMEs in all stages of their life cycle, our project will also bring important JOB OPPORTUNITIES in sectors of high relevance to the SE, such as e.g. health & social services: Healthcare (HC) workers account for 17.2 million jobs/10% of all jobs in EU28. From 2013 to 2025 health sector employment is expected to grow at a much faster rate (+8.1%) than the overall EU employment (+3%). 1 million new HC jobs are projected by 2020, while an additional 7 million job openings are expected due to replacement needs. Beside HC, SE offers new opportunities as well for a wide range of subsectors, such as silver tourism, development of ICT Apps, IoT, transport, shopping, cleaning, housing, etc. We submit that in line with the EU2020 strategy to increase the employment rate of the population aged 20 to 64, the development of the SE can offer: - Highly skilled tech jobs - Opportunities for low-qualified population to reskill. SE also has competitive strengths in several economic sectors related to the ICT subsectors. e-health derived solutions are included in most of RIS3 (see B2). We expect thus the project to identify relevant practices that will contribute to reach their respective RIS3 objectives and promote the engagement in innovation of SE SMEs. This will allow to develop, from a mid-term perspective, new ICT-products and services that will allow public authorities to deliver better and cheaper care for all. Importantly, by supporting the development of new SMEs in the SE, an obvious intrinsic objective is to generate services and goods that will contribute to improve the quality of life within an ageing society, in particular in rural or remote EU areas.

### **Expected outputs**

In line with the Programmes' instructions and our project objectives, the key result sought "...is an improved implementation of regional policies and programmes, in particular programmes for Growth and Jobs and ETC, that support the creation, development and growth of small and medium sized enterprises", in our case: 8 ERDF Regional or National O.Ps (8 Axes linked to the support of SMEs in 2 Spanish regions, Sweden, Poland, Portugal, Slovenia, France & Ireland). Silver Economy is the economic subsector that will be targeted through such policy instruments in all participating territories. The final objectives of the Action Plans and such improvements recommended will be to contribute to stimulate the market for products and services addressing the needs of elderly persons. This has potential to create a massive pull-effect on existing or emerging markets (e.g. independent living & smart homes, health and wellbeing, tourism, skilling, autonomous vehicles, robotics, specialised medical devices and treatments). In many of these markets, European economic operators have a strong potential for global leadership. In that sense, a better use of Structural Funds should contribute to further develop the sector. In fact, it has to be highlighted that in the public sector investment in the Silver Economy would be possible if public expenditure on active and healthy ageing should be considered an investment against a cost. In that sense, the key result of the project will be to build the engagements of SMEs in the Silver Economy, develop

initiatives and pro-active public policies designed to enable strategic investments aimed at promoting the development of SMES that would benefit from these fast developing market opportunities in areas of products and services supporting active ageing, good health, social inclusion and independence. From a quantitative perspective, among the outputs we should mention:

#### BACK OFFICE RESEARCH/REPORTS:

- 8 regional SWOT analysis & 1 Composite interregional SWOT analysis
- International Benchmark and Identification of 60 Good Practices: average of 6 per partner (3 orientated on policies, projects and initiatives towards target consumers – Active, Dependent and Fragile-Vulnerable people- and 3 clearly orientated on specific economic sectors, mostly housing, health/wellbeing, Robotic & ICT)+ 12 from Euromontana. Peer review and selection of the 18 Best ones
- 8 Action Plans

#### EVENTS FOR EXCHANGE OF EXPERIENCE AND CAPACITY BUILDING

- At least 6 Interregional study visits to learn about partner regions' SME support facilities and entrepreneurship policies, as well as on SE initiatives.
- In parallel: 3 Interregional Workshops & 1 Seminar to discuss Best Practices and how to transfer/adapt them to the needs and potential of the different territories involved. The Workshops will address the mentioned topics and subsectors, and the Seminar cover "Senior Tourism & Accessibility" - 96 Regional Stakeholders group meetings (12/partner)

#### Coordinator

Provincial Government of Teruel (Spain)

#### Participants

- Region Dalarna – The Regional Development Council of Dalarna County (Sweden)
- Cork Institute of Technology (Ireland)
- Soca Valley development centre (Slovenia)
- Society for the Development of the Province of Burgos (SODEBUR) (Spain)
- Eurasanté EEIG (France)
- Regional Development Agency JSC (Poland)
- EUROMONTANA (France)
- Intermunicipal Community CIM Ave (Portugal)

## 17.5 INTENCIVE PROJECT

**Project Title:** INnovation and Technology ENhancing Customer Oriented Health SerVicEs

**Acronym:** INTENCIVE

**From** 2019-08-01 **to** 2023-01-31, ongoing project

**Budget:** EUR 991.490,00

**European Union funding:** EUR 842.766,50

**Web:** <https://www.interregeurope.eu/intencive/>

### Project details

#### Description

**CONTEXT:** Address the societal challenge of ageing society combined with decreasing population in rural and other remote areas. There is a dire need for new, accessible and user friendly models, practices and tools for providing different types of high quality health services accessible to all citizens not depending on their age or place of living. Combining technology to the different phases of service processes with emphasis on the customer orientation means re-thinking and re-planning the health services.

**OBJECTIVE:** To improve the implementation of policies and programmes in terms of health technology innovation-driven and customer-oriented health services in the partner regions and influence the ERDF regional OPs or Regional Strategies.

**PARTNERSHIP:** 6 partners (2 public authorities, 1 association, 1 university, 2 research Innovation centres) from 5 countries (FI, HU, MT, FR, ES). When relevant, authorities in charge of targeted policies, as part of stakeholder groups, are fully committed to provide their support.

**APPROACH:** Two-steps approach in Phase 1. Interregional exchange of experiences in that field and subsequent introduction into their policies of innovative technologies and services in e-health sector. Development of 5 action plans benefitting from peer-reviews and with intense dissemination activities in each region to increase the effectiveness of its implementation under Phase 2.

**MAIN ACTIVITIES and OUTPUTS:** 5 policy instruments addressed (1 per region); 3 of them are related to SF programmes. Basis for exchange of experience: State of the art, evaluation against BIKVA model, 5 study visits & 4 thematic workshops. 6 E-newsletters, 5 regional and 1 final dissemination event for an effective dissemination across Europe.

**MAIN EXPECTED RESULTS:** At least 20 good practices identified, 5 targeted policy instruments improved, 30 staff members will transfer new capacities in their intervention fields. Expected attendance of 270 people in dissemination events.

#### Expected results

The overall objective of INTENCIVE project is to improve the implementation of policies and programmes in terms of health technology innovation-driven and customer-oriented health services in the partner regions and influence the ERDF policies, Regional Operative Strategies and Plans and other selected relevant policies. In operational terms, the

project aims to map the innovations in health technology and the good practices of how those are used in the health services in the partner regions. Thanks to the analysis of best practices found and the exchange of experience, each partner region will be assisted in finding the potential new approaches for planning and organizing their health services. Due attention will be paid to one already pre-identified good practice, namely the Bikva-model involving the customers/end-users based on support to the quadruple helix-approach and enhancement of customer oriented planning. Interregional exchange is focused on the role and use of health technologies, and focused on identifying suitable actions tackling all the main challenges identified, in order to reach the following specific sub-objectives:

- to promote the exchange of experience and sharing of practices among 5 EU regions, through targeted capacity building and exchange events (i.e. thematic workshops, study visits, bilateral meetings);
- to foster the preparation, application and monitoring of 5 Action Plans for integrating and deploying good practices in the health technologies sector within regional policies;
- to promote the involvement of stakeholders in the interregional learning process of health technology innovation through the creation of 5 local stakeholders group;
- to foster dissemination of project results at regional/national level, with ad hoc communication tools, and EU level, thanks to the participation in the Policy Learning Platform of the Interreg Europe programme.

### Expected outputs

Project management: 1 subsidy contract signed. 1 partnership agreement signed by all partners. 6 steering Group (SG) meetings & minutes (4 during phase 1 + 2 SG meetings during phase. 2, including 1 via videoconference). 4 audited progress reports in phase 1. 1 audited progress report and 1 final report in phase 2. Communication and dissemination: 1 communication plan on project level. 1 created and updated project webpage on Interreg Europe website. 1 handout about the project translated into each partner language. 4 eNewsletters published. 5 press conferences (one in each partner region) to launch the Action plans. 5 dissemination events (one in each partner region) to launch the Action plans. 16 press releases issued by the partners (5 in every region to launch the project, 6 related to Sc1 in Finland and each thematic workshop/study visit and 5 in every region in connection to launching the Action Plans). Exchange of experiences: 5 stakeholder groups created (1 per target policy). 5 stakeholder group meetings in phase 1 in each partner region (total of 25 meetings and minutes). 1 baseline Analysis / state of the art in terms of e-health technologies. 5 summary reports of suggestions for good practises from each region (50 good practises in total). 5 evaluation reports of selected good practices against the Bikva model (20 good practises in total). 5 study visits lasting 1 day long organized, one in each partner country to exchange experience. 1 peer review meeting on draft action plans; 5 technical papers / minutes after each series of study visits / thematic workshop. 4 thematic workshops. 1 guidance paper for the preparation of the action plans. 1 minutes of the peer-review meeting at

the end of Phase 1 to discuss draft action plans. 5 action plans produced (1 per target policy). 1 policy recommendation paper. 1 dissemination event in Brussels during phase 2. EXPECTED RESULTS: Project management: - Collaborative and team spirit among the partners maintained during the whole period. - Successful project delivery which effective financial management & accounting => all reports submitted in due time. - No serious conflict among partners and achievement of all assigned objectives. Communication and dissemination: Expected attendance of 250 people in dissemination events launching the Action Plans (average of 40 per regional event + 50 participants in the Final Dissemination Event in Brussels); expected average number of sessions at the project pages per month: 80 (560 per reporting period), 15 expected appearances in press & media. Exchange of experiences: At least 20 good practices identified and used to build the 5 action plans. At least 30 staff members/partner with increased capacity: at least 10 staff members will transfer new capacities in their intervention fields; at least 10 involved stakeholders with increased skills & knowledge from exchange of experience; 5 target policies improved.

### Coordinator

Regional Council of South Ostrobothnia (Finland)

### Participants

- Ministry for Gozo (Malta)
- Pannon Business Network Association (Hungary)
- Seinäjoki University of Applied Sciences (Finland)
- ID2Santé, Innovation and development of the healthcare sector in Bretagne (France)
- VALDECILLA BIOMEDICAL RESEARCH INSTITUTE (Spain)

## 18. APPENDIX

APPENDIX 1. Documents with authors from INTENCIVE countries with eHealth as topic (recovered from Web of Science) ordered by number of citations.

Title	Authors	Source Title	Year	Issue	Citations
Junior physician's use of Web 2.0 for information seeking and medical education: A qualitative study	Hughes, Benjamin; Joshi, Indra; Lemonde, Hugh; Wareham, Jonathan	INTERNATIONAL JOURNAL OF MEDICAL INFORMATICS	2009	10	118
Technology in Parkinson's disease: Challenges and opportunities	Espay, Alberto J.; Bonato, Paolo; Nahab, Fatta B.; Maetzler, Walter; Dean, John M.; Klucken, Jochen; Eskofier, Bjoern M.; Merola, Aristide; Horak, Fay; Lang, Anthony E.; Reilmann, Ralf; Giuffrida, Joe; Nieuwboer, Alice; Horne, Malcolm; Little, Max A.; Litvan, Irene; Simuni, Tanya; Dorsey, E. Ray; Burack, Michelle A.; Kubota, Ken; Kamondi, Anita; Godinho, Catarina; Daneault, Jean-Francois; Mitsi, Georgia; Krinke, Lothar; Hausdorff, Jeffery M.; Bloem, Bastiaan R.; Papapetropoulos, Spyros	MOVEMENT DISORDERS	2016	9	111
Mobile Clinical Decision Support Systems and Applications: A Literature and Commercial Review	Martinez-Perez, Borja; de la Torre-Diez, Isabel; Lopez-Coronado, Miguel; Sainz-de-Abajo, Beatriz; Robles, Montserrat; Miguel Garcia-Gomez, Juan	JOURNAL OF MEDICAL SYSTEMS	2014	1	104
Health 2.0 and Medicine 2.0: Tensions and Controversies in the Field	Hughes, Benjamin; Joshi, Indra; Wareham, Jonathan	JOURNAL OF MEDICAL INTERNET RESEARCH	2008	3	104
Why do people use gamification services?	Hamari, Juho; Koivisto, Jonna	INTERNATIONAL JOURNAL OF INFORMATION MANAGEMENT	2015	4	89



Working out for likes: An empirical study on social influence in exercise gamification	Hamari, Juho; Koivisto, Jonna	COMPUTERS IN HUMAN BEHAVIOR	2015		83
Ehealth: Low FODMAP diet vs Lactobacillus rhamnosus GG in irritable bowel syndrome	Pedersen, Natalia; Andersen, Nynne Nyboe; Vegh, Zsuzsanna; Jensen, Lisbeth; Ankersen, Dorit Vedel; Felding, Maria; Simonsen, Mette Hestetun; Burisch, Johan; Munkholm, Pia	WORLD JOURNAL OF GASTROENTEROLOGY	2014	43	81
Health information seeking on the Internet: a double divide? Results from a representative survey in the Paris metropolitan area, France, 2005-2006	Renahy, Emilie; Parizot, Isabelle; Chauvin, Pierre	BMC PUBLIC HEALTH	2008		71
Predictors of treatment dropout in self-guided web-based interventions for depression: an 'individual patient data' meta-analysis	Karyotaki, E.; Kleiboer, A.; Smit, F.; Turner, D. T.; Pastor, A. M.; Andersson, G.; Berger, T.; Botella, C.; Breton, J. M.; Carlbring, P.; Christensen, H.; de Graaf, E.; Griffiths, K.; Donker, T.; Farrer, L.; Huibers, M. J. H.; Lenndin, J.; Mackinnon, A.; Meyer, B.; Moritz, S.; Riper, H.; Spek, V.; Vernmark, K.; Cuijpers, P.	PSYCHOLOGICAL MEDICINE	2015	13	69
Toward Ubiquitous Mobility Solutions for Body Sensor Networks on HealthCare	Caldeira, Joao M. L. P.; Rodrigues, Joel J. P. C.; Lorenz, Pascal	IEEE COMMUNICATIONS MAGAZINE	2012	5	65
Improvement of maternal health services through the use of mobile phones	Noordam, A. Camielle; Kuepper, Barbara M.; Stekelenburg, Jelle; Milen, Anneli	TROPICAL MEDICINE & INTERNATIONAL HEALTH	2011	5	64
Toward personal eHealth in cardiology. Results from the EPI-MEDICS telemedicine project	Rubel, P; Fayn, J; Nollo, G; Assanelli, D; Li, B; Restier, L; Adami, S; Arod, S; Atoui, H; Ohlsson, M; Simon-Chautemps, L; Telisson, D; Malossi, C; Ziliani, GL; Galassi, A; Edenbrandt, L; Chevalier, P	JOURNAL OF ELECTROCARDIOLOGY	2005	4	62
Preventing the obesity epidemic by second generation tailored health	Enwald, Heidi Paivyt Karoliina; Huotari, Maija-Leena Aulikki	Journal of medical Internet research	2010	2	61

communication: an interdisciplinary review.					
A Survey on M2M Systems for mHealth: A Wireless Communications Perspective	Kartsakli, Elli; Lalos, Aris S.; Antonopoulos, Angelos; Tennina, Stefano; Di Renzo, Marco; Alonso, Luis; Verikoukis, Christos	SENSORS	2014	10	59
A Web-Based Psychoeducational Program for Informal Caregivers of Patients With Alzheimer's Disease: A Pilot Randomized Controlled Trial	Cristancho-Lacroix, Victoria; Wrobel, Jeremy; Cantegreil-Kallen, Inge; Dub, Timothee; Rouquette, Alexandra; Rigaud, Anne-Sophie	JOURNAL OF MEDICAL INTERNET RESEARCH	2015	5	52
Analysis of the Security and Privacy Requirements of Cloud-Based Electronic Health Records Systems	Rodrigues, Joel J. P. C.; de la Torre, Isabel; Fernandez, Gonzalo; Lopez-Coronado, Miguel	JOURNAL OF MEDICAL INTERNET RESEARCH	2013	8	50
Connectivity for Healthcare and Well-Being Management: Examples from Six European Projects	Boulos, Maged N. Kamel; Castellot Lou, Ricardo; Anastasiou, Athanasios; Nugent, Chris D.; Alexandersson, Jan; Zimmermann, Gottfried; Cortes, Ulises; Casas, Roberto	INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH	2009	7	50
Innovations in health care services: The CAALYX system	Rocha, Artur; Martins, Angelo; Freire Junior, Jose Celso; Boulos, Maged N. Kamel; Escriche Vicente, Manuel; Feld, Robert; van de Ven, Pepijn; Nelson, John; Bourke, Alan; OLaighin, Gearoid; Sdogati, Claudio; Jobes, Angela; Narvaiza, Leire; Rodriguez-Molinero, Alejandro	INTERNATIONAL JOURNAL OF MEDICAL INFORMATICS	2013	11	47
European COMPARative Effectiveness research on blended Depression treatment versus treatment-as-usual (E-COMPARED): study protocol for a randomized controlled, non-inferiority trial in eight European countries	Kleiboer, Annet; Smit, Jan; Bosmans, Judith; Ruwaard, Jeroen; Andersson, Gerhard; Topooco, Naira; Berger, Thomas; Krieger, Tobias; Botella, Cristina; Banos, Rosa; Chevreul, Karine; Araya, Ricardo; Cerga-Pashoja, Arlinda; Cieslak, Roman; Rogala, Anna; Vis, Christiaan; Draisma, Stasja; van Schaik, Anneke; Kemmeren, Lise; Ebert, David; Berking, Matthias; Funk, Burkhardt; Cuijpers, Pim; Riper, Heleen	TRIALS	2016		44

Overview of the ShARe/CLEF eHealth Evaluation Lab 2013	Suominen, Hanna; Salanterä, Sanna; Velupillai, Sumithra; Chapman, Wendy W.; Savova, Guergana; Elhadad, Noemie; Pradhan, Sameer; South, Brett R.; Mowery, Danielle L.; Jones, Gareth J. F.; Leveling, Johannes; Kelly, Liadh; Goeuriot, Lorraine; Martinez, David; Zuccon, Guido	INFORMATION ACCESS EVALUATION: MULTILINGUALITY, MULTIMODALITY, AND VISUALIZATION	2013		43
The impact of patient-physician web messaging on healthcare service provision	McGeady, David; Kujala, Jaakko; Ilvonen, Karita	INTERNATIONAL JOURNAL OF MEDICAL INFORMATICS	2008	1	43
Health and Social Media: Perfect Storm of Information	Fernandez-Luque, Luis; Bau, Teresa	HEALTHCARE INFORMATICS RESEARCH	2015	2	37
A Novel Neural-Network Model for Deriving Standard 12-Lead ECGs From Serial Three-Lead ECGs: Application to Self-Care	Atoui, Hussein; Fayn, Jocelyne; Rubel, Paul	IEEE TRANSACTIONS ON INFORMATION TECHNOLOGY IN BIOMEDICINE	2010	3	37
Institutional isomorphism and change: the national programme for IT-10 years on	Currie, Wendy L.	JOURNAL OF INFORMATION TECHNOLOGY	2012	3	36
Flexible Data Access Control Based on Trust and Reputation in Cloud Computing	Yan, Zheng; Li, Xueyun; Wang, Mingjun; Vasilakos, Athanasios V.	IEEE TRANSACTIONS ON CLOUD COMPUTING	2017	3	35
Comparison and Characterization of Android-Based Fall Detection Systems	Luque, Rafael; Casilari, Eduardo; Moron, Maria-Jose; Redondo, Gema	SENSORS	2014	10	33
Ehealth monitoring in irritable bowel syndrome patients treated with low fermentable oligo-, di-, mono-saccharides and polyols diet	Pedersen, Natalia; Vegh, Zsuzsanna; Burisch, Johan; Jensen, Lisbeth; Ankersen, Dorit Vedel; Felding, Maria; Andersen, Nynne Nyboe; Munkholm, Pia	WORLD JOURNAL OF GASTROENTEROLOGY	2014	21	33
The Healthgrid White Paper	Breton, Vincent; Dean, Kevin; Solomonides, Tony	FROM GRID TO HEALTHGRID	2005		33

A cross-national analysis of eHealth in the European Union: Some policy and research directions	Currie, Wendy L.; Seddon, Jonathan J. M.	INFORMATION & MANAGEMENT	2014	6	32
Web-Based Interventions Targeting Cardiovascular Risk Factors in Middle-Aged and Older People: A Systematic Review and Meta-Analysis	Beishuizen, Cathrien R. L.; Stephan, Blossom C. M.; van Gool, Willem A.; Brayne, Carol; Peters, Ron J. G.; Andrieu, Sandrine; Kivipelto, Miia; Soininen, Hilka; Busschers, Wim B.; van Charante, Eric P. Moll; Richard, Edo	JOURNAL OF MEDICAL INTERNET RESEARCH	2016	3	30
Healthy Ageing Through Internet Counselling in the Elderly: the HATICE randomised controlled trial for the prevention of cardiovascular disease and cognitive impairment	Richard, Edo; Jongstra, Susan; Soininen, Hilka; Brayne, Carol; van Charante, Eric P. Moll; Meiller, Yannick; van der Groep, Bram; Beishuizen, Cathrien R. L.; Mangialasche, Francesca; Barbera, Mariagnese; Ngandu, Tiia; Coley, Nicola; Guillemont, Juliette; Savy, Stephanie; Dijkgraaf, Marcel G. W.; Peters, Ron J. G.; van Gool, Willem A.; Kivipelto, Miia; Andrieu, Sandrine	BMJ OPEN	2016	6	30
Opportunities and challenges of the Internet of Things for healthcare Systems engineering perspective	Fernandez, Felipe; Pallis, George C.	2014 EAI 4TH INTERNATIONAL CONFERENCE ON WIRELESS MOBILE COMMUNICATION AND HEALTHCARE (MOBIHEALTH)	2014		30
eHealth: Survey on research projects, comparative study of telemonitoring architectures and main issues	Hamdi, Omessaad; Chalouf, Mohamed Aymen; Ouattara, Dramane; Krief, Francine	JOURNAL OF NETWORK AND COMPUTER APPLICATIONS	2014		29
Social media in health - what are the safety concerns for health consumers?	Lau, Annie Y. S.; Gabarron, Elia; Fernandez-Luque, Luis; Armayones, Manuel	HEALTH INFORMATION MANAGEMENT JOURNAL	2012	2	29
Information technology in health promotion	Lintonen, T. P.; Konu, A. I.; Seedhouse, D.	HEALTH EDUCATION RESEARCH	2008	3	29
Patient Use of Email for Health Care Communication Purposes Across 14	Newhouse, Nikki; Lupianez-Villanueva, Francisco; Codagnone, Cristiano; Atherton, Helen	JOURNAL OF MEDICAL INTERNET RESEARCH	2015	3	27

European Countries: An Analysis of Users According to Demographic and Health-Related Factors					
Toward Energy-Efficient and Trustworthy eHealth Monitoring System	Sawand, Ajmal; Djahel, Soufiene; Zhang, Zonghua; Nait-Abdesselam, Farid	CHINA COMMUNICATIONS	2015	1	27
Privacy and security in teleradiology	Ruotsalainen, Pekka	EUROPEAN JOURNAL OF RADIOLOGY	2010	1	27
Proof-of-concept design and development of an EN13606-based electronic health care record service	Munoz, Adolfo; Somolinos, Roberto; Pascual, Mario; Fragua, Juan A.; Gonzalez, Miguel A.; Monteagudo, Jose Luis; Salvador, Carlos H.	JOURNAL OF THE AMERICAN MEDICAL INFORMATICS ASSOCIATION	2007	1	27
Analysis of Android Device-Based Solutions for Fall Detection	Casilari, Eduardo; Luque, Rafael; Moron, Maria-Jose	SENSORS	2015	8	26
Human centred design considerations for connected health devices for the older adult.	Harte, Richard P; Glynn, Liam G; Broderick, Barry J; Rodriguez-Molinero, Alejandro; Baker, Paul M A; McGuiness, Bernadette; O'Sullivan, Leonard; Diaz, Marta; Quinlan, Leo R; OLaighin, Gearoid	Journal of personalized medicine	2014	2	26
Usability problems do not heal by themselves: National survey on physicians' experiences with EHRs in Finland	Kaipio, Johanna; Laaveri, Tinja; Hypponen, Hannele; Vainiomaki, Suvi; Reponen, Jarmo; Kushniruk, Andre; Borycki, Elizabeth; Vanska, Jukka	INTERNATIONAL JOURNAL OF MEDICAL INFORMATICS	2017		25
Mobile health and wellness application framework	Laakko, T.; Leppaenen, J.; Lahteenmaeki, J.; Nummiahho, A.	METHODS OF INFORMATION IN MEDICINE	2008	3	24
Effects of Mobile Learning in Medical Education: A Counterfactual Evaluation	Briz-Ponce, Laura; Antonio Juanes-Mendez, Juan; Jose Garcia-Penalvo, Francisco; Pereira, Anabela	JOURNAL OF MEDICAL SYSTEMS	2016	6	23
eHealth Solutions in the Context of Internet of Things	Sebestyen, Gheorghe; Hangan, Anca; Oniga, Stefan; Gal, Zoltan	2014 IEEE INTERNATIONAL CONFERENCE ON AUTOMATION, QUALITY AND TESTING, ROBOTICS	2014		23

Survey of Internet of Things technologies for clinical environments	Lopez, Pablo; Fernandez, David; Jara, Antonio J.; Skarmeta, Antonio F.	2013 IEEE 27TH INTERNATIONAL CONFERENCE ON ADVANCED INFORMATION NETWORKING AND APPLICATIONS WORKSHOPS (WAINA)	2013		23
Effects and barriers to deployment of telehealth wellness programs for chronic patients across 3 European countries	Barberan-Garcia, A.; Vogiatzis, I.; Solberg, H. S.; Vilaro, J.; Rodriguez, D. A.; Garasen, H. M.; Troosters, T.; Garcia-Aymerich, J.; Roca, J.	RESPIRATORY MEDICINE	2014	4	22
Towards Using Blockchain Technology for eHealth Data Access Management	Rifi, Nabil; Rachkidi, Elie; Agoulmine, Nazim; Taher, Nada Chendeb	2017 FOURTH INTERNATIONAL CONFERENCE ON ADVANCES IN BIOMEDICAL ENGINEERING (ICABME)	2017		21
Understanding persuasion contexts in health gamification: A systematic analysis of gamified health behavior change support systems literature	Alahaivala, Tuomas; Oinas-Kukkonen, Harri	INTERNATIONAL JOURNAL OF MEDICAL INFORMATICS	2016		20
Validation of the eHealth Literacy Scale (eHEALS) in Spanish University Students	Paramio Perez, Gema; Jesus Almagro, Bartolome; Hernando Gomez, Angel; Aguaded Gomez, Jose Ignacio	REVISTA ESPANOLA DE SALUD PUBLICA	2015	3	20
Addressing healthy aging populations in developing countries: unlocking the opportunity of eHealth and mHealth.	Henriquez-Camacho, Cesar; Losa, Juan; Miranda, J Jaime; Cheyne, Natalie E	Emerging themes in epidemiology	2014	1	18
From Practice to Theory and back to Practice: Reflexivity in Measurement and Evaluation for Evidence-based Policy Making in the Information Society	Misuraca, Gianluca; Codagnone, Cristiano; Rossel, Pierre	GOVERNMENT INFORMATION QUARTERLY	2013		18
A preliminary usability evaluation of Web-based portal application for patients with schizophrenia	Koivunen, M.; Valimaki, M.; Pitkanen, A.; Kuosmanen, L.	JOURNAL OF PSYCHIATRIC AND MENTAL HEALTH NURSING	2007	5	18

Smart system for children's chronic illness monitoring	Sendra, Sandra; Parra, Lorena; Lloret, Jaime; Tomas, Jesus	INFORMATION FUSION	2018		17
Mobile applications in oncology: is it possible for patients and healthcare professionals to easily identify relevant tools?	Brouard, Benoit; Bardo, Pascale; Bonnet, Clement; Mounier, Nicolas; Vignot, Marina; Vignot, Stephane	ANNALS OF MEDICINE	2016	7	17
User-Generated Online Health Content: A Survey of Internet Users in the United Kingdom	O'Neill, Braden; Ziebland, Sue; Valderas, Jose; Lupianez-Villanueva, Francisco	JOURNAL OF MEDICAL INTERNET RESEARCH	2014	4	17
Implementing transnational telemedicine solutions: A connected health project in rural and remote areas of six Northern Periphery countries	Casey, Monica; Hayes, Patrick S.; Heaney, David; Dowie, Lee; O'Leighin, Gearoid; Matero, Matti; Hun, Soo; Knarvik, Undine; Alrutz, Kate; Eadie, Leila; Glynn, Liam G.	EUROPEAN JOURNAL OF GENERAL PRACTICE	2013	1	17
Semantic similarity-based alignment between clinical archetypes and SNOMED CT: An application to observations	Meizoso Garcia, Maria; Iglesias Allones, Jose Luis; Martinez Hernandez, Diego; Taboada Iglesias, Maria Jesus	INTERNATIONAL JOURNAL OF MEDICAL INFORMATICS	2012	8	17
eHealth usage patterns of European general practitioners: A five-year (2002-2007) comparative study	Ortega Egea, Jose Manuel; Roman Gonzalez, Maria Victoria; Recio Menendez, Manuel	INTERNATIONAL JOURNAL OF MEDICAL INFORMATICS	2010	8	17
Health search engine with e-document analysis for reliable search results	Gaudinat, A; Ruch, P; Joubert, M; Uziel, P; Strauss, A; Thonnet, M; Baud, R; Spahni, S; Weber, P; Bonal, J; Boyer, C; Fieschi, M; Geissbuhler, A	INTERNATIONAL JOURNAL OF MEDICAL INFORMATICS	2006	1	17
An architecture and protocol for smart continuous eHealth monitoring using 5G	Lloret, Jaime; Parra, Lorena; Taha, Miran; Tomas, Jesus	COMPUTER NETWORKS	2017		16
Postoperative monitoring with a mobile application after ambulatory	Debono, Bertrand; Bousquet, Philippe; Sabatier, Pascal; Plas, Jean-Yves; Lescure, Jean-Paul; Hamel, Olivier	EUROPEAN SPINE JOURNAL	2016	11	16

lumbar discectomy: an effective tool for spine surgeons					
Pilot randomised controlled trial of Help4Mood, an embodied virtual agent-based system to support treatment of depression	Burton, Christopher; Tatar, Aurora Szentagotai; McKinsty, Brian; Matheson, Colin; Matu, Silviu; Moldovan, Ramona; Macnab, Michele; Farrow, Elaine; David, Daniel; Pagliari, Claudia; Serrano Blanco, Antoni; Wolters, Maria	JOURNAL OF TELEMEDICINE AND TELECare	2016	6	16
Usage and Effectiveness of a Fully Automated, Open-Access, Spanish Web-Based Smoking Cessation Program: Randomized Controlled Trial	Mananes, Guillermo; Vallejo, Miguel A.	JOURNAL OF MEDICAL INTERNET RESEARCH	2014	4	15
Sharing Ontology between ICD 11 and SNOMED CT will enable Seamless Re-use and Semantic Interoperability	Rodrigues, Jean-Marie; Schulz, Stefan; Rector, Alan; Spackman, Kent; Uestuen, Bedirhan; Chute, Christopher G.; Della Mea, Vincenzo; Millar, Jane; Persson, Kristina Brand	MEDINFO 2013: PROCEEDINGS OF THE 14TH WORLD CONGRESS ON MEDICAL AND HEALTH INFORMATICS, PTS 1 AND 2	2013		15
ENABLING COMMUNICATION AND COOPERATION IN BIO-NANOSENSOR NETWORKS: TOWARD INNOVATIVE HEALTHCARE SOLUTIONS	Agoulmine, Nazim; Kim, Kihyun; Kim, Sungho; Rim, Taiuk; Lee, Jeong-Soo; Meyyappan, M.	IEEE WIRELESS COMMUNICATIONS	2012	5	15
From eHealth to iHealth: Transition to Participatory and Personalized Medicine in Mental Health	Berrouiguet, Sofian; Perez-Rodriguez, Mercedes M.; Larsen, Mark; Baca-Garcia, Enrique; Courtet, Philippe; Oquendo, Maria	JOURNAL OF MEDICAL INTERNET RESEARCH	2018	1	14
Effects of a Web-Based Personalized Intervention on Physical Activity in European Adults: A Randomized Controlled Trial	Marsaux, Cyril F. M.; Celis-Morales, Carlos; Fallaize, Rosalind; Macready, Anna L.; Kolossa, Silvia; Woolhead, Clara; O'Donovan, Clare B.; Forster, Hannah; Navas-Carretero, Santiago; San-Cristobal, Rodrigo; Lambrinou, Christina-Paulina; Moschonis, George; Surwillo, Agnieszka; Godlewska, Magdalena; Goris, Annelies; Hoonhout, Jettie; Drevon, Christian A.; Manios, Yannis; Traczyk, Iwona;	JOURNAL OF MEDICAL INTERNET RESEARCH	2015	10	14



	Walsh, Marianne C.; Gibney, Eileen R.; Brennan, Lorraine; Martinez, J. Alfredo; Lovegrove, Julie A.; Gibney, Michael J.; Daniel, Hannelore; Mathers, John C.; Saris, Wim H. M.				
Mobile health and maternal care: A winning combination for healthcare in the developing world?	Al Dahdah, Marine; Du Lou, Annabel Desgreess; Meadel, Cecile	HEALTH POLICY AND TECHNOLOGY	2015	3	14
Overview of the CLEF eHealth Evaluation Lab 2015	Goeuriot, Lorraine; Kelly, Liadh; Suominen, Hanna; Hanlen, Leif; Neveol, Aurelie; Grouin, Cyril; Palotti, Joao; Zuccon, Guido	EXPERIMENTAL IR MEETS MULTILINGUALITY, MULTIMODALITY, AND INTERACTION	2015		14
Secure Publish-Subscribe Protocols for Heterogeneous Medical Wireless Body Area Networks	Picazo-Sanchez, Pablo; Tapiador, Juan E.; Peris-Lopez, Pedro; Suarez-Tangil, Guillermo	SENSORS	2014	12	14
Digital Pathology in Europe: Coordinating Patient Care and Research Efforts	Garcia Rojo, Marcial; Punys, Vytenis; Slodkowska, Janina; Schrader, Thomas; Daniel, Christel; Blobel, Bernd	MEDICAL INFORMATICS IN A UNITED AND HEALTHY EUROPE	2009		14
A comparison of websites from Spanish, American and British hospitals	Llinas, G.; Rodriguez-Inesta, D.; Mira, J. J.; Lorenzo, S.; Aibar, C.	METHODS OF INFORMATION IN MEDICINE	2008	2	14
A Psychometric Analysis of the Italian Version of the eHealth Literacy Scale Using Item Response and Classical Test Theory Methods	Diviani, Nicola; Dima, Alexandra Lelia; Schulz, Peter Johannes	JOURNAL OF MEDICAL INTERNET RESEARCH	2017	4	13
Validation of a Kinect-based telerehabilitation system with total hip replacement patients	Anton, David; Nelson, Mark; Russell, Trevor; Goni, Alfredo; Illarramendi, Arantza	JOURNAL OF TELEMEDICINE AND TELE CARE	2016	3	13
Adoption of health information technologies by physicians for clinical practice: The Andalusian case	Villalba-Mora, Elena; Casas, Isabel; Lupianez-Villanueva, Francisco; Maghiros, Ioannis	INTERNATIONAL JOURNAL OF MEDICAL INFORMATICS	2015	7	13

On-The-Fly Model-Based Testing of Web Services with Jambition	Frantzen, Lars; Huerta, Maria de las Nieves; Kiss, Zsolt Gere; Wallet, Thomas	WEB SERVICES AND FORMAL METHODS	2009		13
Internet and health: Lessons learned from the French national survey on households living conditions in 2005	Renahy, E.; Parizot, I.; Chauvin, P.	REVUE D EPIDEMIOLOGIE ET DE SANTE PUBLIQUE	2008	2	13
Medical Students' Expectations Towards an Implementation of a Family Medicine Textbook as a Comprehensive App in Germany	Sandholzer, Maximilian; Rurik, Imre; Deutsch, Tobias; Frese, Thomas	JOURNAL OF MEDICAL SYSTEMS	2014	10	12
Portable Devices, Sensors and Networks: Wireless Personalized eHealth Services	Pharow, Peter; Blobel, Bernd; Ruotsalainen, Pekka; Petersen, Françoise; Hovsto, Asbjørn	MEDICAL INFORMATICS IN A UNITED AND HEALTHY EUROPE	2009		12
A biopsy of Breast Cancer mobile applications: state of the practice review	Giunti, G.; Giunta, D. H.; Guisado-Fernandez, E.; Bender, J. L.; Fernandez-Luque, L.	INTERNATIONAL JOURNAL OF MEDICAL INFORMATICS	2018		11
Enhancing the provision of health and social care in Europe through eHealth	De Raeve, P.; Gomez, S.; Hughes, P.; Lyngholm, T.; Sipilä, M.; Kilanska, D.; Hussey, P.; Xyrichis, A.	INTERNATIONAL NURSING REVIEW	2017	1	11
A Machine-to-Machine protocol benchmark for eHealth applications - Use case: Respiratory rehabilitation	Talaminos-Barroso, Alejandro; Estudillo-Valderrama, Miguel A.; Roa, Laura M.; Reina-Tosina, Javier; Ortega-Ruiz, Francisco	COMPUTER METHODS AND PROGRAMS IN BIOMEDICINE	2016		11
eHealth and mHealth: current developments in 2014 and perspectives in oncology	Brouard, Benoit; Bardo, Pascale; Vignot, Marina; Bonnet, Clément; Vignot, Stéphane	BULLETIN DU CANCER	2014	10	11
Smokers' risk perception, socioeconomic status and source of information on cancer	Peretti-Watel, Patrick; Seror, Valerie; Verger, Pierre; Guignard, Romain; Legleye, Stéphane; Beck, François	ADDICTIVE BEHAVIORS	2014	9	11

Multidisciplinary Approaches to Achieving Efficient and Trustworthy eHealth Monitoring Systems	Sawand, Aural; Djahel, Souficne; Zhang, Zonghua; Nait-Abdesselam, Farid	2014 IEEE/CIC INTERNATIONAL CONFERENCE ON COMMUNICATIONS IN CHINA (ICCC)	2014		11
Finland's Strategy and Implementation of Citizens' Access to Health Information	Ruotsalainen, Pekka; Iivari, Anna-Kaisa; Doupi, Persephone	MEDICAL AND CARE COMPUTICS 5	2008		11
The grid as a Healthcare provision tool	Hernandez, V; Blanquer, I	METHODS OF INFORMATION IN MEDICINE	2005	2	11
Towards the framework of adaptive user interfaces for eHealth	Vasilyeva, E; Pechenizkiy, M; Puuronen, S	18th IEEE Symposium on Computer-Based Medical Systems, Proceedings	2005		11
Wearable Sensors Integrated with Internet of Things for Advancing eHealth Care	Bayo-Monton, Jose-Luis; Martinez-Millana, Antonio; Han, Weisi; Fernandez-Llatas, Carlos; Sun, Yan; Traver, Vicente	SENSORS	2018	6	10
eHealth interventions for family carers of people with long term illness: A promising approach?	Sin, Jacqueline; Henderson, Claire; Spain, Debbie; Cornelius, Victoria; Chen, Tao; Gillard, Steve	CLINICAL PSYCHOLOGY REVIEW	2018		10
eHealth in integrated care programs for people with multimorbidity in Europe: Insights from the ICARE4EU project	Melchiorre, Maria Gabriella; Papa, Roberta; Rijken, Mieke; van Ginneken, Ewout; Hujala, Anneli; Barbabella, Francesco	HEALTH POLICY	2018	1	10
Use of social media for e-Government in the public health sector: A systematic review of published studies	Tursunbayeva, Aizhan; Franco, Massimo; Pagliari, Claudia	GOVERNMENT INFORMATION QUARTERLY	2017	2	10
Persuasive user experiences of a health Behavior Change Support System: A 12-month study for prevention of metabolic syndrome	Karppinen, Pasi; Oinas-Kukkonen, Harri; Alahaivala, Tuomas; Jokelainen, Terhi; Keranen, Anna-Maria; Salonurmi, Tuire; Savolainen, Markku	INTERNATIONAL JOURNAL OF MEDICAL INFORMATICS	2016		10
A novel approach to improve the planning of adaptive and interactive	Breso, Adrian; Martinez-Miranda, Juan; Fuster-Garcia, Elies; Miguel Garcia-Gomez, Juan	INTERNATIONAL JOURNAL OF HUMAN-COMPUTER STUDIES	2016		10

sessions for the treatment of Major Depression					
An electronic system (PDA) to record dietary and physical activity in obese adolescents; data about efficiency and feasibility	Oliver, Elia; Banos, Rosa M.; Cebolla, Ausias; Lurbe, Empar; Alvarez-Pitti, Julio; Botella, Cristina	NUTRICION HOSPITALARIA	2013	6	10
eHealth literacy research-Quo vadis?	Griebel, Lena; Enwald, Heidi; Gilstad, Heidi; Pohl, Anna-Lena; Moreland, Julia; Sedlmayr, Martin	INFORMATICS FOR HEALTH & SOCIAL CARE	2018	4	9
Exploratory study of the implications of research on the use of smart connected devices for prevention: a scoping review	Petit, Audrey; Cambon, Linda	BMC PUBLIC HEALTH	2016		9
Modelling and Predicting eHealth Usage in Europe: A Multidimensional Approach From an Online Survey of 13,000 European Union Internet Users	Torrent-Sellens, Joan; Diaz-Chao, Angel; Soler-Ramos, Ivan; Saigi-Rubio, Francesc	JOURNAL OF MEDICAL INTERNET RESEARCH	2016	7	9
A Multi-Stage Human Factors and Comfort Assessment of Instrumented Insoles Designed for Use in a Connected Health Infrastructure	Harte, Richard; Quinlan, Leo R.; Glynn, Liam; Rodriguez-Molinero, Alejandro; Scharf, Thomas; Carenas, Carlos; Reixach, Elisenda; Garcia, Joan; Carrabina, Jordi; OLaighin, Gearoid	JOURNAL OF PERSONALIZED MEDICINE	2015	4	9
Empowering patients through eHealth: a case report of a pan-European project	Lettieri, Emanuele; Fumagalli, Lia P.; Radaelli, Giovanni; Bertele, Paolo; Vogt, Jess; Hammerschmidt, Reinhard; Lara, Juan L.; Carriazo, Ana; Masella, Cristina	BMC HEALTH SERVICES RESEARCH	2015		9
Managing the Privacy and Security of eHealth Data	Soceanu, Alexandru; Vasylenko, Maksym; Egner, Alexandru; Muntean, Traian	2015 20TH INTERNATIONAL CONFERENCE ON CONTROL SYSTEMS AND COMPUTER SCIENCE	2015		9

Identity Management-In Privacy We Trust: Bridging the Trust Gap in eHealth Environments	Tormo, Gines Dolera; Marmol, Felix Gomez; Girao, Joao; Martinez Perez, Gregorio	IEEE SECURITY & PRIVACY	2013	6	9
Nordic eHealth Indicators: Organisation of Research, First Results and Plan for the Future	Hypponen, Hannele; Faxvaag, Arild; Gilstad, Heidi; Hardardottir, Gudrun Audur; Jerlvall, Lars; Kangas, Maarit; Koch, Sabine; Nohr, Christian; Pehrsson, Thomas; Reponen, Jarmo; Walldius, Ake; Vimarlund, Vivian	MEDINFO 2013: PROCEEDINGS OF THE 14TH WORLD CONGRESS ON MEDICAL AND HEALTH INFORMATICS, PTS 1 AND 2	2013		9
Access control management in electronic health records: a systematic literature review	Carrion Senor, Inmaculada; Fernandez Aleman, Jose Luis; Toval, Ambrosio	GACETA SANITARIA	2012	5	9
Municipal Communications Infrastructure for Rural Telemedicine in a Latin-American Country	Zambrano, A.; Garcia, R. I.; Huerta, M. K.; De Andrade, M.	IEEE LATIN AMERICA TRANSACTIONS	2012	2	9
Exploring the Specific Needs of Persons with Multiple Sclerosis for mHealth Solutions for Physical Activity: Mixed-Methods Study	Giunti, Guido; Kool, Jan; Rivera Romero, Octavio; Dorronzoro Zubiete, Enrique	JMIR MHEALTH AND UHEALTH	2018	2	8
Towards 5G Network Slicing over Multiple-Domains	Afolabi, Ibrahim; Ksentini, Adlen; Bagaa, Miloud; Taleb, Tarik; Corici, Marius; Nakao, Akihiro	IEICE TRANSACTIONS ON COMMUNICATIONS	2017	11	8
Analysis of ISO/IEEE 11073 built-in security and its potential IHE-based extensibility	Rubio, Oscar J.; Trigo, Jesus D.; Alesanco, Alvaro; Serrano, Luis; Garcia, Jose	JOURNAL OF BIOMEDICAL INFORMATICS	2016		8
Horizon 2020 Priorities in Clinical Mental Health Research: Results of a Consensus-Based ROAMER Expert Survey	Elfeddali, Iman; van der Feltz-Cornelis, Christina M.; van Os, Jim; Knappe, Susanne; Vieta, Eduard; Wittchen, Hans-Ulrich; Obradors-Tarrago, Carla; Maria Haro, Josep	INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH	2014	10	8
Interoperability Standards enabling cross-border Patient Summary Exchange	Chronaki, Catherine; Estelrich, Ana; Cangiali, Giorgio; Melgara, Marcello; Kalra, Dipak; Gonzaga, Zabrina; Garber, Larry; Blechman, Elaine; Ferguson, Jamie; Kay, Stephen	E-HEALTH - FOR CONTINUITY OF CARE	2014		8

RFID in eHealth: How to Combat Medication Errors and Strengthen Patient Safety	Peris-Lopez, Pedro; Safkhani, Masoumeh; Bagheri, Nasour; Naderi, Majid	JOURNAL OF MEDICAL AND BIOLOGICAL ENGINEERING	2013	4	8
Recipe Recommendation: Accuracy and Reasoning	Freyne, Jill; Berkovsky, Shlomo; Smith, Gregory	USER MODELING, ADAPTATION, AND PERSONALIZATION	2011		8
Intra-Body Temperature Monitoring using a Biofeedback Solution	Caldeira, Joao M. L. P.; Moutinho, Jose A. F.; Vaidya, Binod; Lorenz, Pascal; Rodrigues, Joel J. P. C.	SECOND INTERNATIONAL CONFERENCE ON EHEALTH, TELEMEDICINE, AND SOCIAL MEDICINE: ETELEMED 2010, PROCEEDINGS	2010		8
Sealife: A Semantic Grid Browser for the Life Sciences Applied to the Study of Infectious Diseases	Schroeder, Michael; Burger, Albert; Kostkova, Patty; Stevens, Robert; Habermann, Bianca; Dieng-Kuntz, Rose	CHALLENGES AND OPPORTUNITIES OF HEALTHGRIDS	2006		8
An OpenNCP-based Solution for Secure eHealth Data Exchange	Staffa, Mariacarla; Sgaglione, Luigi; Mazzeo, Giovanni; Coppolino, Luigi; D'Antonio, Salvatore; Romano, Luigi; Gelenbe, Erol; Stan, Oana; Carpov, Sergiu; Grivas, Evangelos; Campegianni, Paolo; Castaldo, Luigi; Votis, Konstantinos; Koutkias, Vassilis; Komnios, Ioannis	JOURNAL OF NETWORK AND COMPUTER APPLICATIONS	2018		7
A Telerehabilitation System for the Selection, Evaluation and Remote Management of Therapies	Anton, David; Berges, Idoia; Bermudez, Jesus; Goni, Alfredo; Illarramendi, Arantza	SENSORS	2018	5	7
Exploring Digital Health Use and Opinions of University Students: Field Survey Study.	Montagni, Ilaria; Cariou, Tanguy; Feuillet, Tiphaine; Langlois, Emmanuel; Tzourio, Christophe	JMIR mHealth and uHealth	2018	3	7
Detecting Motor Impairment in Early Parkinson's Disease via Natural Typing Interaction With Keyboards: Validation of the neuroQWERTY Approach in an Uncontrolled At-Home Setting	Arroyo-Gallego, Teresa; Ledesma-Carbayo, Maria J.; Butterworth, Ian; Matarazzo, Michele; Montero-Escribano, Paloma; Puertas-Martin, Veronica; Gray, Martha L.; Giancardo, Luca; Sanchez-Ferro, Alvaro	JOURNAL OF MEDICAL INTERNET RESEARCH	2018	3	7

Power transmission and workload balancing policies in eHealth mobile cloud computing scenarios	Pagan, Josue; Zapater, Marina; Ayala, Jose L.	FUTURE GENERATION COMPUTER SYSTEMS-THE INTERNATIONAL JOURNAL OF ESCIENCE	2018		7
Internet use, eHealth literacy and attitudes toward computer/internet among people with schizophrenia spectrum disorders: a cross-sectional study in two distant European regions	Athanasopoulou, Christina; Valimaki, Maritta; Koutra, Katerina; Lottyniemi, Eliisa; Bertias, Antonios; Basta, Maria; Vgontzas, Alexandros N.; Lionis, Christos	BMC MEDICAL INFORMATICS AND DECISION MAKING	2017		7
Improving the efficiency and reliability of wearable based mobile eHealth applications	Garcia-Perez, Cesar; Diaz-Zayas, Almudena; Rios, Alvaro; Merino, Pedro; Katsalis, Kostas; Chang, Chia-Yu; Shariat, Shahab; Nikaein, Navid; Rodriguez, Pilar; Morris, Donal	PERVASIVE AND MOBILE COMPUTING	2017		7
Human-Centered Design Study: Enhancing the Usability of a Mobile Phone App in an Integrated Falls Risk Detection System for Use by Older Adult Users	Harte, Richard; Quinlan, Leo R.; Glynn, Liam; Rodriguez-Molinero, Alejandro; Baker, Paul M. A.; Scharf, Thomas; OLaighin, Gearoid	JMIR MHEALTH AND UHEALTH	2017	5	7
On analyzing user location discovery methods in smart homes: A taxonomy and survey	Ahvar, Ehsan; Daneshgar-Moghaddam, Nafiseh; Ortiz, Antonio M.; Lee, Gyu Myoung; Crespi, Noel	JOURNAL OF NETWORK AND COMPUTER APPLICATIONS	2016		7
Hierarchical, virtualised and distributed intelligence 5G architecture for low-latency and secure applications	Siddiqui, M. S.; Legarrea, A.; Escalona, E.; Parker, M. C.; Koczian, G.; Walker, S. D.; Lyberopoulos, G.; Theodoropoulou, E.; Filis, K.; Foglar, A.; Ulbricht, M.; Liu, Y.; Point, J. C.; Trouva, E.; Rokkas, Th.; Neokosmidis, I.; Kritharidis, D.; Katsaros, K.; Spirou, S.; Habel, K.; Jungnickel, V.; Canales, C.; Lorenzo, M.	TRANSACTIONS ON EMERGING TELECOMMUNICATIONS TECHNOLOGIES	2016	9	7
Computer-assisted initial diagnosis of rare diseases	Alves, Rui; Pinol, Marc; Vilaplana, Jordi; Teixido, Ivan; Cruz, Joaquim; Comas, Jorge; Vilaprinoy, Ester; Sorribas, Albert; Solsona, Francesc	PEERJ	2016		7

Monitoring and Follow-up of Chronic Heart Failure: a Literature Review of eHealth Applications and Systems	de la Torre Diez, Isabel; Garcia-Zapirain, Begona; Mendez-Zorrilla, Amaia; Lopez-Coronado, Miguel	JOURNAL OF MEDICAL SYSTEMS	2016	7	7
Development, Validation, and Implementation of an Innovative Mobile App for Alcohol Dependence Management: Protocol for the SIDEAL Trial	Barrio, Pablo; Ortega, Lluisa; Bona, Xavier; Gual, Antoni	JMIR RESEARCH PROTOCOLS	2016	1	7
A patient as a self-manager of their personal data on health and disease with new technology--challenges for nursing education.	Hopia, Hanna; Punna, Mari; Laitinen, Teemu; Latvala, Eila	Nurse education today	2015	12	7
Implementation of a cross-border health service: physician and pharmacists' opinions from the epSOS project	Moharra, Montse; Almazan, Cari; Decool, Marie; Nilsson, Anna-Lena; Allegratti, Natalia; Seven, Merik	FAMILY PRACTICE	2015	5	7
Coverage-Based Testing for Service Level Agreements	Palacios, Marcos; Garcia-Fanjul, Jose; Tuyá, Javier; Spanoudakis, George	IEEE TRANSACTIONS ON SERVICES COMPUTING	2015	2	7
Barriers to the implementation of mobile phone reminders in pediatric HIV care: a pre-trial analysis of the Cameroonian MORE CARE study	Bigna, Jean Joel R.; Noubiap, Jean Jacques N.; Plottel, Claudia S.; Kouanfack, Charles; Koulla-Shiro, Sinata	BMC HEALTH SERVICES RESEARCH	2014		7
PREDIRCAM eHealth platform for individualized telemedical assistance for lifestyle modification in the treatment of obesity, diabetes, and cardiometabolic risk prevention: a pilot study (PREDIRCAM 1).	Gonzalez, Cintia; Herrero, Pau; Cubero, Jose M; Iniesta, Jose M; Hernando, M Elena; Garcia-Saez, Gema; Serrano, Alvaro J; Martinez-Sarriegui, Inaki; Perez-Gandia, Carmen; Gomez, Enrique J; Rubinat, Esther; Alcantara, Valeria; Brugues, Eulalia; Chico, Ana; Mato, Eugenia; Bell, Olga; Corcoy, Rosa; de Leiva, Alberto	Journal of diabetes science and technology	2013	4	7



Improving diabetes management with electronic medical records	Varroud-Vial, M.	DIABETES & METABOLISM	2011		7
COST Action EuroTelepath: digital pathology integration in electronic health record, including primary care centres	Garcia Rojo, Marcial; Morillo Castro, Ana; Goncalves, Luis	DIAGNOSTIC PATHOLOGY	2011		7
RFID in eHealth systems: applications, challenges, and perspectives	Bouet, Mathieu; Pujolle, Guy	ANNALS OF TELECOMMUNICATIONS	2010	9-10	7
Data Integration in eHealth: A Domain/Disease Specific Roadmap	Ure, Jenny; Procter, Rob; Martone, Maryann; Porteous, David; Lloyd, Sharon; Lawrie, Stephen; Job, Dominic; Baldock, Richard; Philp, Alistair A.; Liewald, Dave; Rakebrandt, Frank; Blaikie, Alan; McKay, Clare; Anderson, Stuart; Ainsworth, John; van Hemert, Jano; Blanquer, Ignacio; Sinnott, Richard; Barillot, Christian; Gibaud, Frank Bernard; Williams, Alan; Hartwood, Mark; Watson, Paul; Smith, Leslie; Burger, Albert; Kennedy, Jessie; Gonzalez-Velez, Horacio; Stevens, Robert; Corcho, Oscar; Morton, Robin; Linksted, Pamela; Deschenes, Mylene; McGilchrist, Mark; Johnson, Paul; Voss, Alex; Gertz, Renate; Wardlaw, Joanna	FROM GENES TO PERSONALIZED HEALTHCARE: GRID SOLUTIONS FOR THE LIFE SCIENCES	2007		7
Differences in the Use and Opinions About New eHealth Technologies Among Patients With Psychosis: Structured Questionnaire	Bonet, Lucia; Llacer, Blanca; Hernandez-Viadel, Miguel; Arce, David; Blanquer, Ignacio; Canete, Carlos; Escarti, Maria; Gonzalez-Pinto, Ana M.; Sanjuan, Julio	JMIR MENTAL HEALTH	2018	3	6
Supply and Demand in mHealth Apps for Persons With Multiple Sclerosis: Systematic Search in App Stores and Scoping Literature Review	Giunti, Guido; Guisado Fernandez, Estefania; Dorronzoro Zubiete, Enrique; Rivera Romero, Octavio	JMIR MHEALTH AND UHEALTH	2018	5	6

KONFIDO: An OpenNCP-Based Secure eHealth Data Exchange System	Staffa, Mariacarla; Coppolino, Luigi; Sgaglione, Luigi; Gelenbe, Erol; Komnios, Ioannis; Grivas, Evangelos; Stan, Oana; Castaldo, Luigi	SECURITY IN COMPUTER AND INFORMATION SCIENCES, EURO-CYBERSEC 2018	2018		6
Health Behavior Change Support Systems as a research discipline; A viewpoint	Kelders, Saskia M.; Oinas-Kukkonen, Harri; Oorni, Anssi; van Gemert-Pijnen, Julia E. W. C.	INTERNATIONAL JOURNAL OF MEDICAL INFORMATICS	2016		6
Discussion of The New Role of Biomedical informatics in the Age of Digital Medicine	Al-Shorbaji, Najeeb; Bellazzi, Riccardo; Bernaldo de Quiros, Fernan Gonzalez; Kochs, Sabine; Kulikowski, Casimir A.; Lovell, Nigel H.; Maojo, Victor; Park, Hyeoun-Ae; Sanz, Ferran; Sarkar, Indra N.; Tanaka, Hiroshi	METHODS OF INFORMATION IN MEDICINE	2016	5	6
A personalized follow-up of kidney transplant recipients using video conferencing based on a 1-year scoring system predictive of long term graft failure (TELEGRAFT study): protocol for a randomized controlled trial	Foucher, Yohann; Meurette, Aurelie; Daguin, Pascal; Bonnaud-Antignac, Angelique; Hardouin, Jean-Benoit; Chailan, Sabrina; Neau, Karine; Papuchon, Emmanuelle; Gaboriau, Sandra; Legendre, Christophe; Morelon, Emmanuel; Tessier, Philippe; Giral, Magali	BMC NEPHROLOGY	2015		6
LOW INTRUSIVE EHEALTH MONITORING: HUMAN POSTURE AND ACTIVITY LEVEL DETECTION WITH AN INTELLIGENT FURNITURE NETWORK	Heikkila, Tapio; Strommer, Esko; Kivikunnas, Sauli; Jarviluoma, Markku; Korkalainen, Marko; Kyllonen, Vesa; Sarjanoja, Esa-Matti; Peltomaa, Irina	IEEE WIRELESS COMMUNICATIONS	2013	4	6
Exploring a methodology for eHealth indicator development	Hypponen, Hannele; Ammenwerth, Elske; de Keizer, Nicolet	QUALITY OF LIFE THROUGH QUALITY OF INFORMATION	2012		6
Yummy Tricks: A Serious Game for Learning Healthy Eating Habits	Ingles-Camats, Gerard; Presno-Rivas, Maria Montserrat; Antonijoan, Marc; Garcia-Panella, Oscar; Forrest, Tallulah	ADVANCING CANCER EDUCATION AND HEALTHY LIVING IN OUR COMMUNITIES: PUTTING VISIONS AND INNOVATIONS INTO ACTION	2012		6

Framework Model and Principles for Trusted Information Sharing in Pervasive Health	Ruotsalainen, Pekka; Blobel, Bernd; Nykanen, Pirkko; Seppala, Antto; Sorvari, Hannu	USER CENTRED NETWORKED HEALTH CARE	2011		6
Virtual Worlds to enhance Ambient-Assisted Living	Cascado, Daniel; Jesus Romero, Salvador; Hors, Santiago; Braserio, Angel; Fernandez-Luque, Luis; Luis Sevillano, Jose	2010 ANNUAL INTERNATIONAL CONFERENCE OF THE IEEE ENGINEERING IN MEDICINE AND BIOLOGY SOCIETY (EMBC)	2010		6
Towards a National Health Information System Evaluation	Hypponen, Hannele; Doupi, Persephone; Hamalainen, Paivi; Komulainen, Jorma; Nykanen, Pirkko; Suomi, Reima	MEDINFO 2010, PTS I AND II	2010		6
The Role of Ontologies for Sustainable, Semantically Interoperable and Trustworthy EHR Solutions	Blobel, Bernd; Kalra, Dipak; Koehn, Marc; Lunn, Ken; Pharow, Peter; Ruotsalainen, Pekka; Schulz, Stefan; Smith, Barry	MEDICAL INFORMATICS IN A UNITED AND HEALTHY EUROPE	2009		6
Comparing the Apgar Score Representation in HL7 and OpenEHR Formalisms	Cuggia, Marc; Bayat, Sahar; Rossille, Delphine; Poulain, Patrice; Pladys, Patrick; Robert, Helene; Duvauferrier, Regis	MEDICAL INFORMATICS IN A UNITED AND HEALTHY EUROPE	2009		6
Requirements for User-Friendly Personal Health Information Systems	Nykanen, Pirkko	MEDICAL AND CARE COMPUNETICS 5	2008		6
Current Status of National eHealth and Telemedicine Development in Finland	Reponen, Jarmo; Winblad, Ilkka; Hamalainen, Paivi	EHEALTH: COMBINING HEALTH TELEMATICS, TELEMEDICINE, BIOMEDICAL ENGINEERING AND BIOINFORMATICS TO THE EDGE: GLOBAL EXPERTS SUMMIT TEXTBOOK	2008		6
A customizable mobile tool for supporting health behavior interventions	Koskinen, Esa; Sahninen, Jukka	2007 ANNUAL INTERNATIONAL CONFERENCE OF THE IEEE ENGINEERING IN MEDICINE AND BIOLOGY SOCIETY, VOLS 1-16	2007		6

5GTANGO: A Beyond-MANO Service Platform	Parada, C.; Bonnet, J.; Fotopoulou, E.; Zafeiropoulos, A.; Kapassa, E.; Touloupou, M.; Kyriazis, D.; Vilalta, R.; Munoz, R.; Casellas, R.; Martinez, R.; Xilouris, G.	2018 EUROPEAN CONFERENCE ON NETWORKS AND COMMUNICATIONS (EUCNC)	2018		5
Engaging older people in an internet platform for cardiovascular risk self-management: a qualitative study among Dutch HATICE participants	van Middelaar, Tessa; Beishuizen, Cathrien R. L.; Guillemont, Juliette; Barbera, Mariagnese; Richard, Edo; van Charante, Eric P. Moll	BMJ OPEN	2018	1	5
Collaborative eHealth Meets Security: Privacy-Enhancing Patient Profile Management	Sanchez-Guerrero, Rosa; Almenarez Mendoza, Florina; Diaz-Sanchez, Daniel; Arias Cabarcos, Patricia; Marin Lopez, Andres	IEEE JOURNAL OF BIOMEDICAL AND HEALTH INFORMATICS	2017	6	5
Real-time communication for Kinect-based telerehabilitation	Anton, David; Kurillo, Gregorij; Goni, Alfredo; Illarramendi, Arantza; Bajcsy, Ruzena	FUTURE GENERATION COMPUTER SYSTEMS-THE INTERNATIONAL JOURNAL OF ESCIENCE	2017		5
Self-management and Shared Decision-Making in Alcohol Dependence via a Mobile App: a Pilot Study	Barrio, Pablo; Ortega, Lluisa; Lopez, Hugo; Gual, Antoni	INTERNATIONAL JOURNAL OF BEHAVIORAL MEDICINE	2017	5	5
Effect of tailored, gamified, mobile physical activity intervention on life satisfaction and self-rated health in young adolescent men: A population-based, randomized controlled trial (MOPO study)	Pyky, Riitta; Koivumaa-Honkanen, Heli; Leinonen, Anna-Maiju; Ahola, Riikka; Hirvonen, Noora; Enwald, Heidi; Luoto, Tim; Ferreira, Eija; Ikaheimo, Tiina M.; Keinanen-Kiukaanniemi, Sirkka; Mantysaari, Matti; Jamsa, Timo; Korpelainen, Raija	COMPUTERS IN HUMAN BEHAVIOR	2017		5
Internet-based peer support for Meniere's disease: a summary of web-based data collection, impact evaluation, and user evaluation	Pyykko, Ilmari; Manchaiah, Vinaya; Levo, Hilla; Kentala, Erna; Juhola, Martti	INTERNATIONAL JOURNAL OF AUDIOLOGY	2017	7	5
An ICT-Based Platform to Monitor Protocols in the Healthcare Environment	Roris, Victor M. Alonso; Gago, Juan M. Santos; Sabucedo, Luis Alvarez; Merino, Mateo Ramos; Valero, Javier Sanz	JOURNAL OF MEDICAL SYSTEMS	2016	10	5

Clinical Information Extraction at the CLEF eHealth Evaluation Lab 2016.	Neveol, Aurelie; Cohen, K Bretonnel; Grouin, Cyril; Hamon, Thierry; Lavergne, Thomas; Kelly, Liadh; Goeuriot, Lorraine; Rey, Gregoire; Robert, Aude; Tannier, Xavier; Zweigenbaum, Pierre	CEUR workshop proceedings	2016		5
Overview of the CLEF eHealth Evaluation Lab 2016	Kelly, Liadh; Goeuriot, Lorraine; Suominen, Hanna; Neveol, Aurelie; Palotti, Joao; Zuccon, Guido	EXPERIMENTAL IR MEETS MULTILINGUALITY, MULTIMODALITY, AND INTERACTION, CLEF 2016	2016		5
Secure Cloud-Based Solutions for Different eHealth Services in Spanish Rural Health Centers	de la Torre-Diez, Isabel; Lopez-Coronado, Miguel; Garcia-Zapirain Soto, Begonya; Mendez-Zorrilla, Amaia	JOURNAL OF MEDICAL INTERNET RESEARCH	2015	7	5
Evaluating a Web-Based Clinical Decision Support System for Language Disorders Screening in a Nursery School	Martin Ruiz, Maria Luisa; Valero Duboy, Miguel Angel; Torcal Loriente, Carmen; Pau de la Cruz, Ivan	JOURNAL OF MEDICAL INTERNET RESEARCH	2014	5	5
Context-aware Mobility Management with WiFi/3G Offloading for eHealth WBANs	Cherkaoui, El Hadi; Agoulmine, Nazim	2014 IEEE 16TH INTERNATIONAL CONFERENCE ON E-HEALTH NETWORKING, APPLICATIONS AND SERVICES (HEALTHCOM)	2014		5
Incentives for telehealthcare deployment that support integrated care: a comparative analysis across eight European countries	Lluch, Maria	INTERNATIONAL JOURNAL OF INTEGRATED CARE	2013		5
Towards an intelligent exploitation of heterogeneous and distributed resources in cooperative environments of eHealth	Nageba, E.; Rubel, P.; Fayn, J.	IRBM	2013	1	5
The Role of Architecture and Ontology for Interoperability	Blobel, Bernd; Gonzalez, Carolina; Oemig, Frank; Lopez, Diego; Nykanen, Pirkko; Ruotsalainen, Pekka	SEAMLESS CARE - SAFE CARE: THE CHALLENGES OF INTEROPERABILITY AND PATIENT SAFETY IN HEALTH CARE	2010		5

eHealth sensors. Biomedical sensors, algorithms and sensors networks	Noury, N.; Fleury, A.; Nocua, R.; Poujaud, J.; Gehin, C.; Dittmar, A.; Delhomme, G.; Demongeot, J.; McAdam, E.	IRBM	2009	3	5
Social Network of PESCA (Open Source Platform for eHealth)	Sanchez, Carlos L.; Romero-Cuevas, Miguel; Lopez, Diego M.; Lorca, Julio; Alcazar, Francisco J.; Ruiz, Sergio; Mercado, Carmen; Garcia-Fortea, Pedro	MEDICAL AND CARE COMPUNETICS 5	2008		5
Outlook for Grid Service technologies within the @neurIST eHealth environment.	Arbona, A.; Benkner, S.; Fingberg, J.; Frangi, A. F.; Hofmann, M.; Hose, D. R.; Lonsdale, G.; Ruefenacht, D.; Viceconti, M.	CHALLENGES AND OPPORTUNITIES OF HEALTHGRIDS	2006		5
Fuzzy view-based semantic search	Holi, Markus; Hyvonen, Eero	SEMANTIC WEB - ASWC 2006, PROCEEDINGS	2006		5
Radiology as a part of a comprehensive telemedicine and eHealth network in Northern Finland.	Reponen, Jarmo	International journal of circumpolar health	2004	4	5
Modeling and Predicting Outcomes of eHealth Usage by European Physicians: Multidimensional Approach from a Survey of 9196 General Practitioners	Torrent-Sellens, Joan; Diaz-Chao, Angel; Soler-Ramos, Ivan; Saigi-Rubio, Francesc	JOURNAL OF MEDICAL INTERNET RESEARCH	2018	10	4
Detecting hospital-acquired infections: A document classification approach using support vector machines and gradient tree boosting	Ehrentraut, Claudia; Ekholm, Markus; Tanushi, Hideyuki; Tiedemann, Jorg; Dalianis, Hercules	HEALTH INFORMATICS JOURNAL	2018	1	4
Consumer Adoption of Future MyData-Based Preventive eHealth Services: An Acceptance Model and Survey Study	Koivumaki, Timo; Pekkarinen, Saara; Lappi, Minna; Vaisanen, Jere; Juntunen, Jouni; Pikkarainen, Minna	JOURNAL OF MEDICAL INTERNET RESEARCH	2017	12	4

Telemedicine in Primary Care for Patients With Chronic Conditions: The ValCronic Quasi-Experimental Study	Orozco-Beltran, Domingo; Sanchez-Molla, Manuel; Jesus Sanchez, Julio; Joaquin Mira, Jose	JOURNAL OF MEDICAL INTERNET RESEARCH	2017	12	4
Preserving patients' privacy in health scenarios through a multicontext-aware system	Huertas Celdran, Alberto; Gil Perez, Manuel; Garcia Clemente, Felix J.; Martinez Perez, Gregorio	ANNALS OF TELECOMMUNICATIONS	2017	9-10	4
Engagement as a Driver of Growth of Online Health Forums: Observational Study	Gopalsamy, Rahul; Semenov, Alexander; Pasiliao, Eduardo; McIntosh, Scott; Nikolaev, Alexander	JOURNAL OF MEDICAL INTERNET RESEARCH	2017	8	4
Feasibility of digital footprint data for health analytics and services: an explorative pilot study	Harjumaa, Marja; Saraniemi, Salla; Pekkarinen, Saara; Lappi, Minna; Simila, Heidi; Isomursu, Minna	BMC MEDICAL INFORMATICS AND DECISION MAKING	2016		4
Population Aging in the European Information Societies: Towards a Comprehensive Research Agenda in eHealth Innovations for Elderly	Vancea, Mihaela; Sole-Casals, Jordi	AGING AND DISEASE	2016	4	4
Integration of Personalized Healthcare Pathways in an ICT Platform for Diabetes Managements: A Small-Scale Exploratory Study	Fico, Giuseppe; Fioravanti, Alessio; Teresa Arredondo, Maria; Gorman, Joe; Diazi, Chiara; Arcuri, Giovanni; Conti, Claudio; Pirini, Giampiero	IEEE JOURNAL OF BIOMEDICAL AND HEALTH INFORMATICS	2016	1	4
Cognitive Telemedicine IoT Technology for Dynamically Adaptive eHealth Content Management Reference Framework embedded in Cloud Architecture	Garai, Abel; Attila, Adamko; Pentek, Istvan	2016 7TH IEEE INTERNATIONAL CONFERENCE ON COGNITIVE INFOCOMMUNICATIONS (COGINFOCOM)	2016		4
Will it be Cloud or will it be Fog? F2C, A Novel Flagship Computing	Masip-Bruin, Xavi; Marin-Tordera, Eva; Gomez, Alejandro; Barbosa, Vitor; Alonso, Albert	PROCEEDINGS OF 2016 FUTURE TECHNOLOGIES CONFERENCE (FTC)	2016		4

Paradigm for Highly Demanding Services					
Guided Internet-Based Parent Training for Challenging Behavior in Children With Fetal Alcohol Spectrum Disorder (Strongest Families FASD): Study Protocol for a Randomized Controlled Trial	Turner, Karen; Reynolds, James N.; McGrath, Patrick; Lingley-Pottie, Patricia; Huguet, Anna; Hewitt, Amy; Green, Courtney; Wozney, Lori; Mushquash, Christopher; Muhajarine, Nazeem; Sourander, Andre; Caughey, Heather; Roane, Jessica	JMIR RESEARCH PROTOCOLS	2015	4	4
Performance Analysis of RACH procedure with Beta Traffic-Activated Machine-Type-Communication	Arouk, Osama; Ksentini, Adlen; Taleb, Tarik	2015 IEEE GLOBAL COMMUNICATIONS CONFERENCE (GLOBECOM)	2015		4
Web-Enabled Intelligent Gateways for eHealth Internet-of-Things	Granados, Jose; Rahmani, Amir-Mohammad; Nikander, Pekka; Liljeberg, Pasi; Tenhunen, Hannu	INTERNET OF THINGS: USER-CENTRIC IOT, PT I	2015		4
Enhancing eHealth Smart Applications: A Fog-Enabled Approach	Ramalho, F.; Neto, A.; Santos, K.; Filho, J. B.; Agoulmine, N.	2015 17TH INTERNATIONAL CONFERENCE ON E-HEALTH NETWORKING, APPLICATION & SERVICES (HEALTHCOM)	2015		4
Network-assisted Smart Access Point Selection for Pervasive Real-time mHealth Applications	Varga, Norbert; Piri, Esa; Bokor, Laszlo	6TH INTERNATIONAL CONFERENCE ON EMERGING UBIQUITOUS SYSTEMS AND PERVASIVE NETWORKS (EUSPN 2015)/THE 5TH INTERNATIONAL CONFERENCE ON CURRENT AND FUTURE TRENDS OF INFORMATION AND COMMUNICATION TECHNOLOGIES IN HEALTHCARE (ICTH-2015)	2015		4
Pupils' views on an ICT-based learning environment in health learning	Raiha, Teija; Tossavainen, Kerttu; Enkenberg, Jorma; Turunen, Hannele	TECHNOLOGY PEDAGOGY AND EDUCATION	2014	2	4



Analysis of Dependency Evaluation Models for eHealth Services	Mshali, Haider; Lemlouma, Tayeb; Magoni, Damien	2014 IEEE GLOBAL COMMUNICATIONS CONFERENCE (GLOBECOM 2014)	2014		4
Confidence: Dependencies and their critical role in fostering user acceptance in pervasive applications	Vega-Barbas, Mario; Pau, Ivan; Seoane, Fernando	2014 EAI 4TH INTERNATIONAL CONFERENCE ON WIRELESS MOBILE COMMUNICATION AND HEALTHCARE (MOBIHEALTH)	2014		4
Towards Engineering Trust-Aware Future Internet Systems	Moyano, Francisco; Fernandez, Carmen; Lopez, Javier	ADVANCED INFORMATION SYSTEMS ENGINEERING WORKSHOPS (CAISE)	2013		4
MammoApplet: an interactive Java applet tool for manual annotation in medical imaging	Mata, Christian; Oliver, Arnau; Torrent, Albert; Marti, Joan	IEEE 12TH INTERNATIONAL CONFERENCE ON BIOINFORMATICS & BIOENGINEERING	2012		4
Analysis Model for Personal eHealth Solutions and Services	Mykkanen, Juha; Tuomainen, Mika; Luukkonen, Irmeli; Itala, Timo	SEAMLESS CARE - SAFE CARE: THE CHALLENGES OF INTEROPERABILITY AND PATIENT SAFETY IN HEALTH CARE	2010		4
Across the Atlantic cooperation to address international challenges in eHealth and health IT: Managing toward a common goal	Friedman, Charles P.; Iakovidis, Ilias; Debenedetti, Laurent; Lorenzi, Nancy M.	INTERNATIONAL JOURNAL OF MEDICAL INFORMATICS	2009	11	4
Social Care Informatics - The Missing Partner in eHealth	Rigby, Michael; Hill, Penny; Koch, Sabine; Karki, Jarmo	MEDICAL INFORMATICS IN A UNITED AND HEALTHY EUROPE	2009		4
The Finnish National eHealth Archive and the New Research Possibilities	Virtanen, Teemupekka	CONNECTING HEALTH AND HUMANS	2009		4
A National Study of eHealth Standardization in Finland - Goals and Recommendations	Mykkanen, Juha; Korhonen, Maritta; Porrasmaa, Jari; Tuomainen, Tuula; Ensio, Antero	MEDINFO 2007: PROCEEDINGS OF THE 12TH WORLD CONGRESS ON HEALTH (MEDICAL) INFORMATICS, PTS 1 AND 2: BUILDING SUSTAINABLE HEALTH SYSTEMS	2007		4

Implementing interoperable secure health information systems.	Doupi, Persephone; Ruotsalainen, Pekka; Pohjonen, Hanna	Studies in health technology and informatics	2005		4
Proposing New Blockchain Challenges in eHealth	Gongora Alonso, Susel; Arambarri, Jon; Lopez-Coronado, Miguel; de la Torre Diez, Isabel	JOURNAL OF MEDICAL SYSTEMS	2019	3	3
Mobile phone applications in Parkinson's disease: A systematic review	Linares-del Rey, M.; Vela-Desojo, L.; Cano-de la Cuerda, R.	NEUROLOGIA	2019	1	3
A Web-Based Telemanagement System for Patients With Complex Inflammatory Bowel Disease: Protocol for a Randomized Controlled Clinical Trial	Aguas, Mariam; del Hoyo, Javier; Faubel, Raquel; Munoz, Diana; Dominguez, David; Bastida, Guillermo; Navarro, Belen; Barrios, Alejandra; Valdivieso, Bernardo; Correcher, Marisa; Nos, Pilar	JMIR RESEARCH PROTOCOLS	2018	12	3
Electronic Health Use in the European Union and the Effect of Multimorbidity: Cross-Sectional Survey	Lupianez-Villanueva, Francisco; Anastasiadou, Dimitra; Codagnone, Cristiano; Nuno-Solinis, Roberto; Garcia-Zapirain Soto, Maria Begona	JOURNAL OF MEDICAL INTERNET RESEARCH	2018	5	3
Building an Ethical Framework for Cross-Border Applications: The KONFIDO Project	Faiella, G.; Komnios, I.; Voss-Knude, M.; Cano, I.; Duquenoy, P.; Nalin, M.; Baroni, I.; Matriciano, F.; Clemente, F.	SECURITY IN COMPUTER AND INFORMATION SCIENCES, EURO-CYBERSEC 2018	2018		3
Securely outsourcing the ciphertext-policy attribute-based encryption	Kim Thuat Nguyen; Oualha, Nouha; Laurent, Maryline	WORLD WIDE WEB-INTERNET AND WEB INFORMATION SYSTEMS	2018	1	3
eHealth and health informatics competences: A systemic analysis of literature production based on bibliometrics	Kokol, Peter; Saranto, Kaija; Vosner, Helena Blazun	KYBERNETES	2018	5	3
A Mobile Text Message Intervention to Reduce Repeat Suicidal Episodes: Design and Development of Reconnecting After a Suicide Attempt (RAFT).	Larsen, Mark Erik; Shand, Fiona; Morley, Kirsten; Batterham, Philip J; Petrie, Katherine; Reda, Bill; Berrouguet, Sofian; Haber, Paul S; Carter, Gregory; Christensen, Helen	JMIR mental health	2017	4	3

Online communication in a rehabilitation setting: Experiences of patients with chronic conditions using a web portal in Denmark	Cerdan, Jose; Catalan-Matamoros, Daniel; Berg, Sarah Warny	PATIENT EDUCATION AND COUNSELING	2017	12	3
Combining novelty detectors to improve accelerometer-based fall detection	Medrano, Carlos; Igual, Raul; Garcia-Magarino, Ivan; Plaza, Inmaculada; Azuara, Guillermo	MEDICAL & BIOLOGICAL ENGINEERING & COMPUTING	2017	10	3
Use of the Smartphone to Promote Healthy Habits among Teen-agers, Spain	Carrion, Carme; Arroyo Moliner, Liliana; Castell, Conxa; Puigdomenech, Elisa; Felipe Gomez, Santiago; Domingo, Laia; Espallargues, Mireia	REVISTA ESPANOLA DE SALUD PUBLICA	2016		3
Providing security and fault tolerance in P2P connections between clouds for mHealth services	Lloret, Jaime; Sendra, Sandra; Miguel Jimenez, Jose; Parra, Lorena	PEER-TO-PEER NETWORKING AND APPLICATIONS	2016	5	3
Reusing and Unifying Background Knowledge for Internet of Things with LOV4IoT	Gyrard, Amelie; Atemezing, Ghislain; Bonnet, Christian; Boudaoud, Karima; Serrano, Martin	2016 IEEE 4TH INTERNATIONAL CONFERENCE ON FUTURE INTERNET OF THINGS AND CLOUD (FICLOUD 2016)	2016		3
CHARISMA: Converged Heterogeneous Advanced 5G Cloud-RAN Architecture for Intelligent and Secure Media Access	Parker, M. C.; Koczian, G.; Adeyemi-Ejeye, F.; Quinlan, T.; Walker, S. D.; Legarrea, A.; Siddiqui, M. S.; Escalona, E.; Spirou, S.; Kritharidis, D.; Habel, K.; Jungnickel, V.; Trouva, E.; Kourtis, A.; Liu, Y.; Frigau, M. Sander; Point, J. C.; Lyberopoulos, G.; Theodoropoulou, E.; Filis, K.; Rokkas, Th.; Neokosmidis, I.; Levi, D.; Zetserov, E.; Foglar, A.; Ulbricht, M.; Peternel, B.; Gustincic, D.	2016 EUROPEAN CONFERENCE ON NETWORKS AND COMMUNICATIONS (EUCNC)	2016		3
Privacy Protection and Security in eHealth Cloud Platform for Medical Image Sharing	Vincent, Johann; Pan, Wei; Coatrieux, Gouenou	2016 2ND INTERNATIONAL CONFERENCE ON ADVANCED TECHNOLOGIES FOR SIGNAL AND IMAGE PROCESSING (ATSIP)	2016		3

Understanding children: a qualitative study on health assets of the Internet in Spain	Hernan-Garcia, Mariano; Botello-Diaz, Blanca; Marcos-Marcos, Jorge; Toro-Cardenas, Silvia; Gil-Garcia, Eugenia	INTERNATIONAL JOURNAL OF PUBLIC HEALTH	2015	2	3
Automatic test case generation for WS-Agreements using combinatorial testing	Palacios, Marcos; Garcia-Fanjul, Jose; Tuya, Javier; Spanoudakis, George	COMPUTER STANDARDS & INTERFACES	2015		3
PLAY UP! A SMART KNOWLEDGE-BASED SYSTEM USING GAMES FOR PREVENTING FALLS IN ELDERLY PEOPLE	Kreiner, K.; De Rosario, H.; Gossy, C.; Ejupi, A.; Drobits, M.	EHEALTH2013: HEALTH INFORMATICS MEETS EHEALTH - VON DER WISSENSCHAFT ZUR ANWENDUNG UND ZURUCK: BIG DATA - EHEALTH VON DER DATENANALYSE BIS ZUM WISSENSMANAGEMENT	2013		3
eHealth indicators: results of an expert workshop	Hypponen, Hannele; Ammenwerth, Elske; Nohr, Christian; Faxvaag, Arild; Walldius, Ake	QUALITY OF LIFE THROUGH QUALITY OF INFORMATION	2012		3
Designing Persuasive Health Behavior Change Interventions	Lehto, Tuomas	CRITICAL ISSUES FOR THE DEVELOPMENT OF SUSTAINABLE E-HEALTH SOLUTIONS	2012		3
A System Architecture Supporting the Agile Coordination of Homecare Services	Lamine, Elyes; Zefouni, Sabrina; Bastide, Remi; Pingaud, Herve	COLLABORATIVE NETWORKS FOR A SUSTAINABLE WORLD	2010		3
Open Source Virtual Worlds and Low Cost Sensors for Physical Rehab of Patients with Chronic Diseases	Romero, Salvador J.; Fernandez-Luque, Luis; Sevillano, Jose L.; Vognild, Lars	ELECTRONIC HEALTHCARE, SECOND INTERNATIONAL ICST CONFERENCE, EHEALTH 2009	2010		3
User-Centered Evaluation Model for Medical Digital Libraries	Kostkova, Patty; Madle, Gemma	KNOWLEDGE MANAGEMENT FOR HEALTH CARE PROCEDURES	2009		3
Towards ISO 13606 and openEHR Archetype-Based Semantic Interoperability	Martinez-Costa, Catalina; Menarguez-Tortosa, Marcos; Tomas Fernandez-Breis, Jesualdo	MEDICAL INFORMATICS IN A UNITED AND HEALTHY EUROPE	2009		3

An Optimized eHealth Platform to Provide Electronic Services over Dynamic Networking Environments	Plaza, Pierre; Sanz, Nuria; Luis Gonzalez, Jose	THIRD INTERNATIONAL CONFERENCE ON DIGITAL SOCIETY: ICDS 2009, PROCEEDINGS	2009		3
Web and Grid Services for improving ambient intelligence embedded in pervasive, personal ECG devices	Atoui, Hussein; Fayn, Jocelyne; Rubel, Paul	CISIS 2008: THE SECOND INTERNATIONAL CONFERENCE ON COMPLEX, INTELLIGENT AND SOFTWARE INTENSIVE SYSTEMS, PROCEEDINGS	2008		3
How to Manage Secure Direct Access of European Patients to their Computerized Medical Record and Personal Medical Record	Quantin, Catherine; Allaert, Francois Andre; Fassa, Maniane; Riandey, Benoit; Avillach, Paul; Cohen, Olivier	MEDICAL AND CARE COMPUTETICS 4	2007		3
Electrocardiogram on a chip: overview and first experiences of an electrocardiogram manufacturer of medium size	Abaecherli, Roger; Braun, Francis; Zhou, Lingchuan; Kraemer, Michel; Felblinger, Jacques; Schmid, Hans-Jakob	JOURNAL OF ELECTROCARDIOLOGY	2006	4	3
Interoperability and HealthGRID	Bescos, C; Schmitt, D; Kass, J; Garcia-Barbero, M; Kantchev, P	METHODS OF INFORMATION IN MEDICINE	2005	2	3
Setting priorities for EU healthcare workforce IT skills competence improvement	Li, Sisi; Bamidis, Panagiotis D.; Konstantinidis, Stathis Th; Traver, Vicente; Car, Josip; Zary, Nabil	HEALTH INFORMATICS JOURNAL	2019	1	2
EuroQol (EQ-5D-5L) Validity in Assessing the Quality of Life in Adults With Asthma: Cross-Sectional Study	Hernandez, Gimena; Garin, Olatz; Dima, Alexandra L.; Pont, Angels; Marti Pastor, Marc; Alonso, Jordi; Van Ganse, Eric; Laforest, Laurent; de Bruin, Marijn; Mayoral, Karina; Serra-Sutton, Vicky; Ferrer, Montse; Herbage, Sandrine; Belhassen, Manon; Ginoux, Marine; Schuck, Stephane; Texier, Nathalie; Leproust, Sandy; Le Cloarec, Helene; Hubbard, Richard; Bourke, Alison; Thompson, Mary; Vial, Delphine; Ansell, David; Olaiz, Javier; Orti, Ana Valcarcel	JOURNAL OF MEDICAL INTERNET RESEARCH	2019	1	2

A Web-Based Telemanagement System for Improving Disease Activity and Quality of Life in Patients With Complex Inflammatory Bowel Disease: Pilot Randomized Controlled Trial	Del Hoyo, Javier; Nos, Pilar; Faubel, Raquel; Munoz, Diana; Dominguez, David; Bastida, Guillermo; Valdivieso, Bernardo; Correcher, Marisa; Aguas, Mariam	JOURNAL OF MEDICAL INTERNET RESEARCH	2018	11	2
Oncology Patient Interest in the Use of New Technologies to Manage Their Disease: Cross-Sectional Survey	Collado-Borrell, Roberto; Escudero-Vilaplana, Vicente; Calles, Antonio; Garcia-Martin, Estela; Marzal-Alfaro, Belen; Gonzalez-Haba, Eva; Herranz-Alonso, Ana; Sanjurjo-Saez, Maria	JOURNAL OF MEDICAL INTERNET RESEARCH	2018	10	2
Systematic Review about QoS and QoE in Telemedicine and eHealth Services and Applications	de la Torre Diez, Isabel; Gongora Alonso, Susel; Hamrioui, Sofiane; Lopez-Coronado, Miguel; Motta Cruz, Eduardo	JOURNAL OF MEDICAL SYSTEMS	2018	10	2
eHealth and the hearing aid adult patient journey: a state-of-the-art review	Paglialonga, Alessia; Nielsen, Annette Cleveland; Ingo, Elisabeth; Barr, Caitlin; Laplante-Levesque, Ariane	BIOMEDICAL ENGINEERING ONLINE	2018		2
Protocol for regional implementation of collaborative self-management services to promote physical activity	Barberan-Garcia, Aneel; Gimeno-Santos, Elena; Blanco, Isabel; Cano, Isaac; Martinez-Palli, Graciela; Burgos, Felip; Miralles, Felip; Coca, Miquel; Murillo, Serafin; Sanz, Maria; Steblin, Alexander; Ubre, Marta; Benavent, Jaume; Vidal, Josep; Sitges, Marta; Roca, Josep	BMC HEALTH SERVICES RESEARCH	2018		2
Digital health in the Americas: advances and challenges in connected health.	Novillo-Ortiz, David; Dumit, Elsy Maria; D'Agostino, Marcelo; Becerra-Posada, Francisco; Kelley, Edward Talbott; Torrent-Sellens, Joan; Jimenez-Zarco, Ana; Saigi-Rubio, Francesc	BMJ innovations	2018	3	2
Relevance of a Mobile Internet Platform for Capturing Inter- and Intrasubject Variabilities in Circadian Coordination During Daily Routine: Pilot Study	Komarzynski, Sandra; Huang, Qi; Innominato, Pasquale F.; Maurice, Monique; Arbaud, Alexandre; Beau, Jacques; Bouchanda, Mohamed; Ulusakarya, Ayhan; Beaumatin, Nicolas; Breda, Gabriele; Finkenstadt, Barbel; Levi, Francis	JOURNAL OF MEDICAL INTERNET RESEARCH	2018	6	2

Neurorehabilitation and apps: A systematic review of mobile applications	Sanchez Rodriguez, M. T.; Collado Vazquez, S.; Martin Casas, P.; Cano de la Cuerda, R.	NEUROLOGIA	2018	5	2
Enhanced functionalities for annotating and indexing clinical text with the NCBO Annotator	Tchechmedjiev, Andon; Abdaoui, Amine; Emonet, Vincent; Melzi, Soumia; Jonnagaddala, Jitendra; Jonquet, Clement	BIOINFORMATICS	2018	11	2
Effects of a multi-component nutritional telemonitoring intervention on nutritional status, diet quality, physical functioning and quality of life of community-dwelling older adults	van Doorn-van Atten, Marije N.; Haveman-Nies, Annemien; van Bakel, Marit M.; Ferry, Monique; Franco, Maite; de Groot, Lisette C. P. G. M.; de Vries, Jeanne H. M.	BRITISH JOURNAL OF NUTRITION	2018	10	2
DIABEO App Software and Telemedicine Versus Usual Follow-Up in the Treatment of Diabetic Patients: Protocol for the TELESAGE Randomized Controlled Trial	Jeandidier, Nathalie; Chaillous, Lucy; Franc, Sylvia; Benhamou, Pierre-Yves; Schaepelynck, Pauline; Hanaire, Helene; Catargi, Bogdan; Farret, Anne; Fontaine, Pierre; Guerri, Bruno; Reznik, Yves; Penfornis, Alfred; Borot, Sophie; Serusclat, Pierre; Kherbachi, Yacine; D'Orsay, Genevieve; Detournay, Bruno; Simon, Pierre; Charpentier, Guillaume	JMIR RESEARCH PROTOCOLS	2018	4	2
Evolution of Cognitive Rehabilitation After Stroke From Traditional Techniques to Smart and Personalized Home-Based Information and Communication Technology Systems: Literature Review.	Cogollor, Jose M; Rojo-Lacal, Javier; Hermsdorfer, Joachim; Ferre, Manuel; Arredondo Waldmeyer, Maria Teresa; Giachritsis, Christos; Armstrong, Alan; Brenosa Martinez, Jose Manuel; Bautista Loza, Doris Anabelle; Sebastian, Jose Maria	JMIR rehabilitation and assistive technologies	2018	1	2
Enhancing Lifestyle Change in Cardiac Patients Through the Do CHANGE System (Do Cardiac Health: Advanced New Generation	Habibovic, Mirela; Broers, Eva; Piera-Jimenez, Jordi; Wetzels, Mart; Ayoola, Idowu; Denollet, Johan; Widdershoven, Jos	JMIR RESEARCH PROTOCOLS	2018	2	2

Ecosystem): Randomized Controlled Trial Protocol					
Framework for Accessibility Evaluation of Hospital Websites	Acosta-Vargas, Patricia; Acosta, Tania; Lujan-Mora, Sergio	2018 FIFTH INTERNATIONAL CONFERENCE ON EDEMOCRACY & EGOVERNMENT (ICEDEG)	2018		2
Healthcare resource utilization and cost among males with lower urinary tract symptoms with a predominant storage component in Spain: The epidemiological, cross-sectional MERCURY study	Errando-Smet, Carlos; Muller-Arteaga, Carlos; Hernandez, Marta; Lenero, Enrique; Roset, Montse	NEUROUROLOGY AND URODYNAMICS	2018	1	2
Activating Technology for Connected Health in Cancer: Protocol for a Research and Training Program	Mountford, Nicola; Dorronzoro Zubiete, Enrique; Kessie, Threase; Garcia-Zapirain, Begonya; Nuno-Solinis, Roberto; Coyle, David; Munksgaard, Kristin B.; Fernandez-Luque, Luis; Rivera Romero, Octavio; Mora Fernandez, Matilde; Valero Jimenez, Pedro; Daly, Ailish; Whelan, Ruth; Caulfield, Brian	JMIR RESEARCH PROTOCOLS	2018	1	2
Cybersecurity Education and Training in Hospitals Proactive Resilience Educational Framework (Prosilience EF)	Rajamaki, Jyri; Nevmerzhitskaya, Julia; Virag, Csaba	PROCEEDINGS OF 2018 IEEE GLOBAL ENGINEERING EDUCATION CONFERENCE (EDUCON) - EMERGING TRENDS AND CHALLENGES OF ENGINEERING EDUCATION	2018		2
Evaluation of an Online Educational Program for Parents and Caregivers of Children With Food Allergies	Ruiz-Baques, A.; Contreras-Porta, J.; Marques-Mejias, M.; Cardenas Rebollo, J. M.; Capel Torres, F.; Arino Pla, M. N.; Zorrozua Santisteban, A.; Chivato, T.	JOURNAL OF INVESTIGATIONAL ALLERGOLOGY AND CLINICAL IMMUNOLOGY	2018	1	2
A new protocol for an efficient and green biometric-based security key establishment in WBAN's	Sammoud, Amal; Hamdi, Omessaad; Chalouf, Mohamed Aymen; Bouallegue, Ammar	2018 14TH INTERNATIONAL WIRELESS COMMUNICATIONS & MOBILE COMPUTING CONFERENCE (IWCMC)	2018		2



Healthcare financialisation and the digital divide in the European Union: Narrative and numbers	Seddon, Jonathan J. J. M.; Currie, Wendy L.	INFORMATION & MANAGEMENT	2017	8	2
Assessing eHealth skills across Europeans	Vicente, Maria Rosalia; Madden, Gary	HEALTH POLICY AND TECHNOLOGY	2017	2	2
Availability of information in Public Health on the Internet: An analysis of national health authorities in the Spanish-speaking Latin American and Caribbean countries	Novillo-Ortiz, David; Hernandez-Perez, Tony; Saigi-Rubio, Francesc	INTERNATIONAL JOURNAL OF MEDICAL INFORMATICS	2017		2
Social media in public health: an analysis of national health authorities and leading causes of death in Spanish-speaking Latin American and Caribbean countries	Novillo-Ortiz, David; Hernandez-Perez, Tony	BMC MEDICAL INFORMATICS AND DECISION MAKING	2017		2
Requirements and Solutions for Personalized Health Systems	Blobel, Bernd; Ruotsalainen, Pekka; Lopez, Diego M.; Oemig, Frank	PHEALTH 2017	2017		2
Collective intelligence and databases in eHealth: A survey	Camacho, Azahara; Merayo, Mercedes G.; Nunez, Manuel	JOURNAL OF INTELLIGENT & FUZZY SYSTEMS	2017	2	2
Addressing security issues in the eHealth domain relying on SIEM solutions	Coppolino, Luigi; D'Antonio, Salvatore; Romano, Luigi; Sgaglione, Luigi; Staffa, Mariacarla	2017 IEEE 41ST ANNUAL COMPUTER SOFTWARE AND APPLICATIONS CONFERENCE (COMPSAC), VOL 2	2017		2
The Association of Health Literacy and Electronic Health Literacy With Self-Efficacy, Coping, and Caregiving Perceptions Among Carers of People With Dementia: Research Protocol for a Descriptive Correlational Study	Efthymiou, Areti; Middleton, Nicos; Charalambous, Andreas; Papastavrou, Evridiki	JMIR RESEARCH PROTOCOLS	2017	11	2

A Survey on Multimedia Quality of Experience Assessment Approaches in Mobile Healthcare Scenarios	Peteri, Tamas; Varga, Norbert; Bokor, Laszlo	EHEALTH 360 DEGREE	2017		2
Towards the Cyber Security Paradigm of eHealth: Resilience and Design Aspects	Rajamaki, Jyri; Pirinen, Rauno	APPLIED MATHEMATICS AND COMPUTER SCIENCE	2017		2
Using Emotions in Intelligent Virtual Environments: The EJaCalIVE Framework	Rincon, Jaime A.; Costa, Angelo; Novais, Paulo; Julian, Vicente; Carrascosa, Carlos	WIRELESS COMMUNICATIONS & MOBILE COMPUTING	2017		2
Trust Model for Protection of Personal Health Data in a Global Environment	Ruotsalainen, Pekka; Blobel, Bernd	MEDINFO 2017: PRECISION HEALTHCARE THROUGH INFORMATICS	2017		2
Nursing Competencies for Multiple Modalities of Connected Health Technologies	Saranto, Kaija; Ronquillo, Charlene; Velez, Olivia	FORECASTING INFORMATICS COMPETENCIES FOR NURSES IN THE FUTURE OF CONNECTED HEALTH	2017		2
Identifying capabilities in innovation projects: Evidences from eHealth	Uruena, Alberto; Hidalgo, Antonio; Arenas, Alvaro E.	JOURNAL OF BUSINESS RESEARCH	2016	11	2
Normalizing acronyms and abbreviations to aid patient understanding of clinical texts: ShARe/CLEF eHealth Challenge 2013, Task 2	Mowery, Danielle L.; South, Brett R.; Christensen, Lee; Leng, Jianwei; Peltonen, Laura-Maria; Salantera, Sanna; Suominen, Hanna; Martinez, David; Velupillai, Sumithra; Elhadad, Noemie; Savova, Guergana; Pradhan, Sameer; Chapman, Wendy W.	JOURNAL OF BIOMEDICAL SEMANTICS	2016		2
e-Dermatology: social networks and other web based tools	Taberner, R.	ACTAS DERMO-SIFILIOGRAFICAS	2016	2	2
A Mobile Health Monitoring Application for Obesity Management and Control Using the Internet-of-Things	Alloghani, Mohamed; Hussain, Abir; Al-Jumeily, Dhiya; Fergus, Paul; Abuelma'atti, Omar; Hamden, Hani	2016 SIXTH INTERNATIONAL CONFERENCE ON DIGITAL INFORMATION PROCESSING AND COMMUNICATIONS (ICDIPC)	2016		2

Context Management and Distribution Architecture Using Software-Defined Networking	da Silva, Madalena Pereira; Nazario, Debora Cabral; Dantas, M. A. R.; Goncalves, Alexandre Leopoldo; Pinto, A. R.; Manerichi, Guilherme; Vanelli, Bruno	2016 IEEE 25TH INTERNATIONAL CONFERENCE ON ENABLING TECHNOLOGIES: INFRASTRUCTURE FOR COLLABORATIVE ENTERPRISES (WETICE)	2016		2
Q4HEALTH: Quality of Service and Prioritisation for Emergency Services in the LTE RAN Stack	Garcia-Perez, Cesar A.; Rios, Alvaro; Merino, Pedro; Katsalis, Kostas; Nikaein, Navid; Figueiredo, Ricardo; Morris, Donal; O'Callaghan, Terry	2016 EUROPEAN CONFERENCE ON NETWORKS AND COMMUNICATIONS (EUCNC)	2016		2
Health Care Performance Indicators for Health Information Systems	Hypponen, Hannele; Ronchi, Elettra; Adler-Milstein, Julia	EVIDENCE-BASED HEALTH INFORMATICS: PROMOTING SAFETY AND EFFICIENCY THROUGH SCIENTIFIC METHODS AND ETHICAL POLICY	2016		2
Improving Learning Tasks for Mentally Handicapped People Using Aml Environments Based on Cyber-Physical Systems	Martin, Diego; Bordel, Borja; Alcarria, Ramon; Sanchez-Picot, Alvaro; Sanchez de Rivera, Diego; Robles, Tomas	UBIQUITOUS COMPUTING AND AMBIENT INTELLIGENCE, UCAMI 2016, PT I	2016		2
European Interoperability Assets Register and Quality Framework Implementation	Moreno-Conde, Alberto; Thienpont, Geert; Lamote, Inge; Coorevits, Pascal; Parra, Carlos; Kalra, Dipak	EXPLORING COMPLEXITY IN HEALTH: AN INTERDISCIPLINARY SYSTEMS APPROACH	2016		2
Assessors Agreement: A Case Study Across Assessor Type, Payment Levels, Query Variations and Relevance Dimensions	Palotti, Joao; Zuccon, Guido; Bernhardt, Johannes; Hanbury, Allan; Goeuriot, Lorraine	EXPERIMENTAL IR MEETS MULTILINGUALITY, MULTIMODALITY, AND INTERACTION, CLEF 2016	2016		2
Adoption Space and the Idea-to-Market Process of Health Technologies	Saranummi, Niilo; Beuscart, Regis; Black, Norman; Maglaveras, Nicos; Strano, Chiara; Karavidopoulou, Youla	PHEALTH 2016	2016		2
FGMReview: Design of a Knowledge Management Tool on Female Genital Mutilation	Martinez Perez, Guillermo; Turetsky, Risa	JOURNAL OF TRANSCULTURAL NURSING	2015	5	2

PSYCHOLOGY 2.0: OPPORTUNITIES AND CHALLENGES FOR THE PSYCHOLOGY PROFESSIONAL IN THE FIELD OF EHEALTH	Armayones, Manuel; Boixados, Merce; Gomez, Beni; Guillamon, Noemi; Hernandez, Eulalia; Nieto, Ruben; Pousada, Modesta; Sara, Beatriz	PAPELES DEL PSICOLOGO	2015	2	2
Design, construction, and implementation of an online platform for patients with type 1 diabetes: EncoDiab	Alvarado-Martel, Dacil; Canas, Francesca; Velasco, Rebeca; Alcubierre, Nuria; Lopez-Rios, Aura; Rius, Ferran; Javier Novoa, Francisco; Carrillo, Armando; Hernandez, Marta; Maria Waegner, Ana; Mauricio, Didac	PATIENT PREFERENCE AND ADHERENCE	2015		2
Non-intrusive Patient Monitoring for Supporting General Practitioners in Following Diseases Evolution	Calvaresi, Davide; Cesarini, Daniel; Marinoni, Mauro; Buonocunto, Paquale; Bandinelli, Stefania; Buttazzo, Giorgio	BIOINFORMATICS AND BIOMEDICAL ENGINEERING (IWBBIO 2015), PT II	2015		2
Simplifying Tele-rehabilitation Devices for Their Practical Use in Non-clinical Environments	Cesarini, Daniel; Calvaresi, Davide; Marinoni, Mauro; Buonocunto, Paquale; Buttazzo, Giorgio	BIOINFORMATICS AND BIOMEDICAL ENGINEERING (IWBBIO 2015), PT II	2015		2
Use of an Holistic Approach for effective adoption of User-Centred-Design Techniques in Diabetes Disease Management: experiences in User Need Elicitation	Fico, Giuseppe; Teresa Arredondo, Maria	2015 37TH ANNUAL INTERNATIONAL CONFERENCE OF THE IEEE ENGINEERING IN MEDICINE AND BIOLOGY SOCIETY (EMBC)	2015		2
Cooperative Dynamic eHealth Service Placement in Mobile Cloud Computing	Rachkidi, Elie; Cherkaoui, El Hadi; Ait-idir, Mustapha; Agoulmine, Nazim; Taher, Nada Chendeb; Santos, Marcelo; Fernandes, Stenio	2015 17TH INTERNATIONAL CONFERENCE ON E-HEALTH NETWORKING, APPLICATION & SERVICES (HEALTHCOM)	2015		2
Monitoring the Amount of Practical Use of eHealth on National Level by Use of Log Data: Lessons Learned	Villumsen, Sidsel; Hardardottir, Gudrun Audur; Kangas, Maarit; Gilstad, Heidi; Brattheim, Berit Johanne; Reponen, Jarmo; Hypponen, Hannele; Nohr, Christian	CONTEXT SENSITIVE HEALTH INFORMATICS: MANY PLACES, MANY USERS, MANY CONTEXTS, MANY USES	2015		2
Design and Implementation of a Tool to Test Service Level Agreements	Palacios, M.; Fanjul, J. G.; Tuya, J.	IEEE LATIN AMERICA TRANSACTIONS	2014	2	2

Trust-Aware Decision-Making Methodology for Cloud Sourcing	Moyano, Francisco; Beckers, Kristian; Fernandez-Gago, Carmen	ADVANCED INFORMATION SYSTEMS ENGINEERING (CAISE 2014)	2014		2
Can IT health-care applications improve the medication tray-filling process at hospital wards? An exploratory study using eye-tracking and stress response	Rodriguez, Natalia Diaz; Lilius, Johan; Danielsson-Ojala, Riitta; Pirinen, Hanna; Kauhanen, Lotta; Salantera, Sanna; Bjorklund, Sebu; Majors, Joachim; Rautanen, Kimmo; Salakoski, Tapio; Tuominen, Ilona	2014 IEEE 16TH INTERNATIONAL CONFERENCE ON E-HEALTH NETWORKING, APPLICATIONS AND SERVICES (HEALTHCOM)	2014		2
Towards Chronic Emergency Response Communities for Anaphylaxis	Schwartz, David G.; Bellou, Abdelouahab; Garcia-Castrillo, Luis; Muraro, Antonella; Papadopoulos, Nikolaos G.	2014 IEEE 15TH INTERNATIONAL CONFERENCE ON INFORMATION REUSE AND INTEGRATION (IRI)	2014		2
Context-Aware Based Quality of Life Telemonitoring	Vargiu, Eloisa; Manuel Fernandez, Juan; Miralles, Felip	DISTRIBUTED SYSTEMS AND APPLICATIONS OF INFORMATION FILTERING AND RETRIEVAL: DART 2012: REVISED AND INVITED PAPERS	2014		2
Analysis of Central Enterprise Architecture Elements in Models of Six eHealth Projects	Virkanen, Hannu; Mykkanen, Juha	E-HEALTH - FOR CONTINUITY OF CARE	2014		2
Quantifying judicious use of health information technology	Tsang, Sandro	JOURNAL OF EVALUATION IN CLINICAL PRACTICE	2013	2	2
FINGERPRINT INDOOR POSITION SYSTEM BASED ON OPENMAC	Veronica Medina, A.; Gomez, Jose A.; Rivera, Octavio; Dorronzoro, Enrique; Merino, Manuel	2011 PROCEEDINGS OF THE INTERNATIONAL CONFERENCE ON WIRELESS INFORMATION NETWORKS AND SYSTEMS (WINSYS 2011)	2011		2
Lessons Learned from Implementation of Information and Communication Technologies in Spain's Healthcare Services Issues and Opportunities	Carnicero, J.; Rojas, D.	APPLIED CLINICAL INFORMATICS	2010	4	2

SHARE road map for HealthGrids: methodology.	Olive, Mark; Rahmouni, Hanene; Solomonides, Tony; Breton, Vincent; Legre, Yannick; Blanquer, Ignacio; Hernandez, Vicente	International journal of medical informatics	2009		2
Healthcare Information Exchange in Regional eHealth Networks Implications for Initiatives in Advancing Shared Care	Harno, Kari; Nykanen, Pirkko; Ohtonen, Jukka; Seppala, Antto; Kopra, Kyosti	INTERNATIONAL CONFERENCE ON EHEALTH, TELEMEDICINE, AND SOCIAL MEDICINE: ETELEMED 2009, PROCEEDINGS	2009		2
Standardization work on personalized eHealth systems	Hine, Nick; Petersen, Francoise; Pluke, Mike; Sund, Torbjorn	2008 30TH ANNUAL INTERNATIONAL CONFERENCE OF THE IEEE ENGINEERING IN MEDICINE AND BIOLOGY SOCIETY, VOLS 1-8	2008		2
WHIST: a web-based survey on health information seeking on Internet in France, 2007.	Renahy, Emilie; Parizot, Isabelle; Chauvin, Pierre	AMIA ... Annual Symposium proceedings. AMIA Symposium	2007		2
eHealth in Europe: towards higher goals.	Doupi, Persephone; Hamalainen, Paivi; Ruotsalainen, Pekka	World hospitals and health services : the official journal of the International Hospital Federation	2005	2	2
UUMA. Regional eHealth services in the hospital district of Helsinki and Uusimaa (HUS).	Harno, Kari	Studies in health technology and informatics	2004		2
Technology-based parenting interventions for children's physical and psychological health: a systematic review and meta-analysis	Flujas-Contreras, Juan M.; Garcia-Palacios, Azucena; Gomez, Inmaculada	PSYCHOLOGICAL MEDICINE	2019	11	1
A Mobile System to Improve Quality of Life Via Energy Balance in Breast Cancer Survivors (BENECa mHealth): Prospective Test-Retest Quasiexperimental Feasibility Study	Lozano-Lozano, Mario; Cantarero-Villanueva, Irene; Martin-Martin, Lydia; Galiano-Castillo, Noelia; Sanchez, Maria-Jose; Fernandez-Lao, Carolina; Postigo-Martin, Paula; Arroyo-Morales, Manuel	JMIR MHEALTH AND UHEALTH	2019	6	1

Special Issue: Empowering eHealth with Smart Internet of Things (IoT) Medical Devices	Amira, Abbas; Agoulmine, Nazim; Bensaali, Faycal; Bermak, Amine; Dimitrakopoulos, George	JOURNAL OF SENSOR AND ACTUATOR NETWORKS	2019	2	1
A corpus to support eHealth Knowledge Discovery technologies.	Piad-Morffis, Alejandro; Gutierrez, Yoan; Munoz, Rafael	Journal of biomedical informatics	2019		1
Liquid Biopsy and eHealth in Heart Failure The Future Is Now	Bayes-Genis, Antoni; Lanfear, David	JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY	2019	17	1
Predictive, Personalized, Preventive and Participatory (4P) Medicine Applied to Telemedicine and eHealth in the Literature	Gongora Alonso, Susel; de la Torre Diez, Isabel; Garcia Zapirain, Begona	JOURNAL OF MEDICAL SYSTEMS	2019	5	1
Applying a Living Lab Approach Within an eHealth Accelerator	Haukipuro, Lotta; Vainamo, Satu; Arhippainen, Leena; Ojala, Timo	TECHNOLOGY INNOVATION MANAGEMENT REVIEW	2019	3	1
Quantitative analysis of manual annotation of clinical text samples	Minarro-Gimenez, Jose A.; Cornet, Ronald; Jaulent, M. C.; Dewenter, Heike; Thun, Sylvia; Goeg, Kirstine Rosenbeck; Karlsson, Daniel; Schulz, Stefan	INTERNATIONAL JOURNAL OF MEDICAL INFORMATICS	2019		1
How to Develop IoT Cloud e-Health Systems Based on FIWARE: A Lesson Learnt	Celesti, Antonio; Fazio, Maria; Galan Marquez, Fermin; Glikson, Alex; Mauwa, Hope; Bagula, Antoine; Celesti, Fabrizio; Villari, Massimo	JOURNAL OF SENSOR AND ACTUATOR NETWORKS	2019	1	1
Implementation and Assessment of an Intelligent Motor Tele-Rehabilitation Platform	Rybarczyk, Yves; Perez Medina, Jorge Luis; Leconte, Louis; Jimenes, Karina; Gonzalez, Mario; Esparza, Danilo	ELECTRONICS	2019	1	1
Health Literacy in Web-Based Health Information Environments: Systematic Review of Concepts, Definitions, and Operationalization for Measurement	Huhta, Anna-Maija; Hirvonen, Noora; Huotari, Maija-Leena	JOURNAL OF MEDICAL INTERNET RESEARCH	2018	12	1
An eHealth information technology platform to help the treatment of mental disorders	Quesada-Arencibia, Alexis; Perez-Brito, Enrique; Garcia-Rodriguez, Carmelo R.; Perez-Brito, Ana	HEALTH INFORMATICS JOURNAL	2018	4	1

SIFR annotator: ontology-based semantic annotation of French biomedical text and clinical notes	Tchechmedjiev, Andon; Abdaoui, Amine; Emonet, Vincent; Zevio, Stella; Jonquet, Clement	BMC BIOINFORMATICS	2018		1
DEDICATE: proposal for a conceptual framework to develop dementia-friendly integrated eCare support	Marceglia, Sara; Rigby, Michael; Alonso, Albert; Keeling, Debbie; Kubitschke, Lutz; Pozzi, Giuseppe	BIOMEDICAL ENGINEERING ONLINE	2018		1
European perspectives on big data applied to health: The case of biobanks and human databases	de Lecuona, Itziar; Villalobos-Quesada, Maria	DEVELOPING WORLD BIOETHICS	2018	3	1
Sustainable securing of Medical Cyber-Physical Systems for the healthcare of the future	Huertas Celdran, Alberto; Gil Perez, Manuel; Garcia Clemente, Felix J.; Martinez Perez, Gregorio	SUSTAINABLE COMPUTING-INFORMATICS & SYSTEMS	2018		1
Suicide prevention and eHealth: towards personalized follow-up strategies?	Berrouiguet, Sofian; Le Moal, Valerie; Guillodo, Elise; Le Floch, Alis; Lenca, Philippe; Billot, Romain; Walter, Michel	M S-MEDECINE SCIENCES	2018	8-9	1
Portable System for Real-Time Detection of Stress Level	Minguillon, Jesus; Perez, Eduardo; Angel Lopez-Gordo, Miguel; Pelayo, Francisco; Jose Sanchez-Carrion, Maria	SENSORS	2018	8	1
A Brief Survey on Six Basic and Reduced eHealth Indicators in Seven Countries in 2017	Haux, Reinhold; Ammenwerth, Elske; Koch, Sabine; Lehmann, Christoph U.; Park, Hyeoun-Ae; Saranto, Kaija; Wong, C. P.	APPLIED CLINICAL INFORMATICS	2018	3	1
Sustainability requirements for connected health applications	Ouhbi, Sofia; Luis Fernandez-Aleman, Jose; Toval, Ambrosio; Rivera Pozo, Jose; Idri, Ali	JOURNAL OF SOFTWARE-EVOLUTION AND PROCESS	2018	7	1
Towards pulse rate parametrization during free-living activities using smart wristband	Rapalis, Andrius; Petrenas, Andrius; Simaityte, Monika; Bailon, Raquel; Marozas, Vaidotas	PHYSIOLOGICAL MEASUREMENT	2018	5	1
Mobile applications related to stroke: a systematic review	Rodriguez-Prunotto, Lucas; Cano-de-la-Cuerda, Roberto	REVISTA DE NEUROLOGIA	2018	7	1



A Component-Based Approach for Securing Indoor Home Care Applications	Agirre, Aitor; Armentia, Aintzane; Estevez, Elisabet; Marcos, Marga	SENSORS	2018	1	1
Automatic Autism Spectrum Disorder Detection Thanks to Eye-Tracking and Neural Network-Based Approach	Carette, Romuald; Cilia, Federica; Dequen, Gilles; Bosche, Jerome; Guerin, Jean-Luc; Vandromme, Luc	INTERNET OF THINGS (IOT) TECHNOLOGIES FOR HEALTHCARE, HEALTHYIOT 2017	2018		1
MAVIE-Lab Sports: a mHealth for Injury Prevention and Risk Management in Sport	Castro, Madelyn Yiseth Rojas; Travanca, Marina; Fernandez, Marta Avalos; Valentin Conesa, David; Orriols, Ludivine; Lagarde, Emmanuel	DH '18: PROCEEDINGS OF THE 2018 INTERNATIONAL CONFERENCE ON DIGITAL HEALTH	2018		1
A Study of an Automatic Stopping Strategy for Technologically Assisted Medical Reviews	Di Nunzio, Giorgio Maria	ADVANCES IN INFORMATION RETRIEVAL (ECIR 2018)	2018		1
Training, the key to improving eHealth literacy of upper secondary school students	Hernandez-Rabanal, Carme; Vall, Aurora; Boter, Clara	GACETA SANITARIA	2018	1	1
Health Professionals' Expanding eHealth Competences for Supporting Patients' Self-Management.	Kujala, Sari; Rajalahti, Elina; Heponiemi, Tarja; Hilama, Pirjo	Studies in health technology and informatics	2018		1
Overview of Health Behavior Change Interventions to Promote Physical-activity-related Adherence in Patients with Heart Disease	Livitckaia, K.; Koutkias, V.; Maglaveras, N.; Kouidi, E.; van Gils, M.; Chouvarda, I.	EMBEC & NBC 2017	2018		1
Monitoring and Benchmarking eHealth in the Nordic Countries.	Nohr, Christian; Koch, Sabine; Vimarlund, Vivian; Gilstad, Heidi; Faxvaag, Arild; Hardardottir, Gudrun Audur; Andreassen, Hege K; Kangas, Maarit; Reponen, Jarmo; Bertelsen, Pernille; Villumsen, Sidsel; Hypponen, Hannele	Studies in health technology and informatics	2018		1
Growth management of eHealth service start-ups	Saarela, Martti; Simunaniemi, Anna-Mari; Muhos, Matti; Leviakangas, Pekka	JOURNAL OF ADVANCES IN MANAGEMENT RESEARCH	2018	1	1

Reliability of the MDi Psoriasis (R) Application to Aid Therapeutic Decision-Making in Psoriasis	Moreno-Ramirez, D.; Herrerias-Esteban, J. M.; Ojeda-Vila, T.; Carrascosa, J. M.; Carretero, G.; de la Cueva, P.; Ferrandiz, C.; Galan, M.; Rivera, R.; Rodriguez-Fernandez, L.; Ruiz-Villaverde, R.; Ferrandiz, L.	ACTAS DERMO-SIFILIOGRAFICAS	2017	7	1
Co-creating and Evaluating a Web-app Mapping Real-World Health Care Services for Students: The servi-Share Protocol	Montagni, Ilaria; Langlois, Emmanuel; Wittwer, Jerome; Tzourio, Christophe	JMIR RESEARCH PROTOCOLS	2017	2	1
Comprehensive Healthcare Interoperability Framework Integrating Telemedicine Consumer Electronics with Cloud Architecture	Garai, Abel	2017 IEEE 15TH INTERNATIONAL SYMPOSIUM ON APPLIED MACHINE INTELLIGENCE AND INFORMATICS (SAMI)	2017		1
A Clinical System Integration Methodology for Bio-Sensory Technology with Cloud Architecture	Garai, Abel; Pentek, Istvan; Adamko, Attila; Nemeth, Agnes	ACTA CYBERNETICA	2017	2	1
Noise Pollution Measurement System Using Wireless Sensor Network and BAN Sensors	Granda Cantuna, Jorge; Solorzano, Santiago; Clairand, Jean-Michel	2017 FOURTH INTERNATIONAL CONFERENCE ON EDEMOCRACY & EGOVERNMENT (ICEDEG)	2017		1
Developing an HMIS Architecture Framework to Support a National Health Care eHealth Strategy Reform: A Case Study from Morocco	Le Pape, Marc A.; Nunez Suarez, Juan Carlos; Mhayi, Abdelkader; Haazen, Dominic; Ozaltin, Emre	HEALTH SYSTEMS & REFORM	2017	1	1
Security in Cross - Border Medical Data Interchange: a Technical Analysis and a Discussion of Possible Improvements	Martino, Raffaele; D'Antonio, Salvatore; Coppolino, Luigi; Romano, Luigi	2017 IEEE 41ST ANNUAL COMPUTER SOFTWARE AND APPLICATIONS CONFERENCE (COMPSAC), VOL 2	2017		1
Stochastic Modeling of Wireless Charged Wearables for Reliable Health Monitoring in Hospital Environments	Mekikis, Prodromos-Vasileios; Antonopoulos, Angelos; Kartsakli, Elli; Passas, Nikos; Alonso, Luis; Verikoukis, Christos	2017 IEEE INTERNATIONAL CONFERENCE ON COMMUNICATIONS (ICC)	2017		1

ICT Services for Life Improvement for the Elderly	Sanchez-Rico, Alejandro; Garel, Pascal; Notarangelo, Isabella; Quintana, Marcos; Hernandez, Gustavo; Asteriadis, Stylianos; Popa, Mirela; Vretos, Nicholas; Solachidis, Vassilis; Burgos, Marta; Girault, Ariane	HARNESSING THE POWER OF TECHNOLOGY TO IMPROVE LIVES	2017		1
A Scoped Review of the Potential for Supportive Virtual Coaches as Adjuncts to Self-guided Web-Based Interventions	Scholten, Mark R.; Kelders, Saskia M.; van Gemert-Pijnen, Julia E. W. C.	PERSUASIVE TECHNOLOGY: DEVELOPMENT AND IMPLEMENTATION OF PERSONALIZED TECHNOLOGIES TO CHANGE ATTITUDES AND BEHAVIORS, PERSUASIVE 2017	2017		1
Efficacy of Seren@ctif, a Computer-Based Stress Management Program for Patients With Adjustment Disorder With Anxiety: Protocol for a Controlled Trial	Servant, Dominique; Leterme, Anne-Claire; Barasino, Olivia; Rouegrez, Laure; Duhamel, Alain; Vaiva, Guillaume	JMIR RESEARCH PROTOCOLS	2017	10	1
CLARUS as a Cloud Security Framework: e-Health Use Case	Vidal, David; Iriso, Santiago; Mulero, Rafael	MEDINFO 2017: PRECISION HEALTHCARE THROUGH INFORMATICS	2017		1
Electronic health and the role of software in drug dispensing and administration	Gauthier, Pascale	THERAPEUTIC DELIVERY	2016	10	1
The Development Process of eHealth Strategy for Nurses in Finland	Ahonen, Outi; Kouri, Pirkko; Kinnunen, Ulla-Mari; Junttila, Kristiina; Liljamo, Pia; Arifulla, Dinah; Saranto, Kaija	NURSING INFORMATICS 2016: EHEALTH FOR ALL: EVERY LEVEL COLLABORATION - FROM PROJECT TO REALIZATION	2016		1
A telematic based approach towards the normalization of clinical praxis	Alonso Roris, Victor M.; Santos Gago, Juan M.; Alvarez Sabucedo, Luis; Ramos Merino, Mateo; Sanz Valero, Javier	NEW ADVANCES IN INFORMATION SYSTEMS AND TECHNOLOGIES, VOL 1	2016		1
Security and Privacy in a DACS	Delgado, Jaime; Llorente, Silvia; Pamies, Marti; Vilalta, Josep	EXPLORING COMPLEXITY IN HEALTH: AN INTERDISCIPLINARY SYSTEMS APPROACH	2016		1

AGEING, WELL-BEING AND TECHNOLOGY: FROM QUALITY OF LIFE IMPROVEMENT TO DIGITAL RIGHTS MANAGEMENT A FRENCH PERSPECTIVE	Devillier, Nathalie	PROCEEDINGS OF THE 2016 ITU KALEIDOSCOPE ACADEMIC CONFERENCE - ICTS FOR A SUSTAINABLE WORLD (ITU WT)	2016		1
Social Media as Catalyzer for Connected Health: Hype or Hope? Perspectives from IMIA Working Groups	Fernandez-Luque, Luis; Vilmarlund, Vivian; Borycki, Elizabeth; Schulz, Stefan; Kuziemy, Craig; Marschollek, Michael; Kulikowski, Casimir A.	NURSING INFORMATICS 2016: EHEALTH FOR ALL: EVERY LEVEL COLLABORATION - FROM PROJECT TO REALIZATION	2016		1
USABILITY TESTING OF GUIDED INTERNET-BASED PARENT TRAINING FOR CHALLENGING BEHAVIOR IN CHILDREN WITH FETAL ALCOHOL SPECTRUM DISORDER (STRONGEST FAMILIES FASD)	Hundert, Amos S.; Huguet, Anna; Green, Courtney R.; Hewitt, Amy J.; Mushquash, Christopher J.; Muhajarine, Nazeem; Sourander, Andre; Coughy, Heather; Lingley-Pottie, Patricia; McGrath, Patrick J.; Reynolds, James N.	JOURNAL OF POPULATION THERAPEUTICS AND CLINICAL PHARMACOLOGY	2016	1	1
Estimating the Physical Activity with Smartphones: Analysis of the Device Position and Comparison with GT3X+Actigraph	Rodriguez, Victor H.; Medrano, Carlos; Plaza, Inmaculada; Corella, Cristina; Abarca, Alberto; Julian, Jose A.	AMBIENT INTELLIGENCE - SOFTWARE AND APPLICATIONS (ISAMI 2016)	2016		1
An Adaptive QoE-Based Network Interface Selection for Multi-homed eHealth Devices	Souhi, Sami; Souidi, Mohamed; Mellouk, Abdelhamid	INTERNET OF THINGS: IOT INFRASTRUCTURES, PT I	2016		1
Context Aware Computing for Ambient Assisted Living	Wlodarczak, Peter; Soar, Jeffrey; Ally, Mustafa	INCLUSIVE SMART CITIES AND DIGITAL HEALTH	2016		1
Silver tourism	Zsarnoczky, Martin	INTERNATIONAL SCIENTIFIC DAYS 2016: THE AGRI-FOOD VALUE CHAIN: CHALLENGES FOR NATURAL RESOURCES MANAGEMENT AND SOCIETY	2016		1

Promoting Healthy Nutrition Behavior Using Mobile Devices and Ubiquitous Computing	Besoain, Felipe; Perez-Navarro, Antoni; Ojeda, Felipe; Antonio Reyes-Suarez, Jose	AMBIENT ASSISTED LIVING: ICT-BASED SOLUTIONS IN REAL LIFE SITUATIONS	2015		1
Promoting the use of health information and communication technologies in Spain: a new approach based on the ICT-H	Blazquez Fernandez, Carla; Cantarero Prieto, David; Pascual Saez, Marta	REVISTA ICONO 14-REVISTA CIENTIFICA DE COMUNICACION Y TECNOLOGIAS	2015	2	1
LEGAL AND ORGANIZATIONAL BARRIERS TO THE DEVELOPMENT OF eHEALTH IN FRANCE	Bouvet, Renaud; Desmarais, Pierre; Minvielle, Etienne	MEDICINE AND LAW	2015	3	1
Framework for Dependable and Pervasive eHealth Services	Celentano, Ulrico; Roning, Juha	2015 IEEE 2ND WORLD FORUM ON INTERNET OF THINGS (WF-IOT)	2015		1
Information Extraction from Clinical Documents: Towards Disease/Disorder Template Filling	Chikka, Veera Raghavendra; Mariyasagayam, Nestor; Niwa, Yoshiki; Karlapalem, Kamalakar	EXPERIMENTAL IR MEETS MULTILINGUALITY, MULTIMODALITY, AND INTERACTION	2015		1
Privacy provision in eHealth using external services	Delgado, Jaime; Llorente, Silvia	DIGITAL HEALTHCARE EMPOWERING EUROPEANS	2015		1
Personalized Message Routing Policy in Pervasive eHealth Applications Based on HL7 RIM	Guizani, Nachoua; Fayn, Jocelyne	PROCEEDINGS OF THE 12TH INTERNATIONAL CONFERENCE ON WEARABLE MICRO AND NANO TECHNOLOGIES FOR PERSONALIZED HEALTH (PHEALTH 2015)	2015		1
Health Informatics Competences for eHealth: What Can We Learn From a Bibliometric Analysis?	Kokol, Peter; Blazun, Helena; Saranto, Kaija	MEDINFO 2015: EHEALTH-ENABLED HEALTH	2015		1
Low-cost Remote Monitoring of Biomedical Signals	Morales, J. M.; Diaz-Piedra, C.; Di Stasi, L. L.; Martinez-Canada, P.; Romero, S.	ARTIFICIAL COMPUTATION IN BIOLOGY AND MEDICINE, PT I (IWINAC 2015)	2015		1

Contextual cloud-based service oriented architecture for clinical workflow	Moreno-Conde, Jesus; Moreno-Conde, Alberto; Nunez-Benjumea, Francisco J.; Parra-Calderon, Carlos	DIGITAL HEALTHCARE EMPOWERING EUROPEANS	2015		1
A Multiple-Stage Approach to Re-ranking Medical Documents	Oh, Heung-Seon; Jung, Yuchul; Kim, Kwang-Young	EXPERIMENTAL IR MEETS MULTILINGUALITY, MULTIMODALITY, AND INTERACTION	2015		1
Towards Efficient Automatic Scaling and Adaptive cost-optimized eHealth Services in Cloud	Rachkidi, Elie; Cherkaoui, El Hadi; Ait-idir, Mustapha; Agoulmine, Nazim; Taher, Nada Chendeb; Santos, Marcelo; Fernandes, Stenio	2015 IEEE GLOBAL COMMUNICATIONS CONFERENCE (GLOBECOM)	2015		1
Patient Lifecycle Management: An Approach for Clinical Processes	Salido Lopez, Alberto; Del Valle, Carmelo; Jose Escalona, Maria; Lee, Vivian; Goto, Masatomo	BIOINFORMATICS AND BIOMEDICAL ENGINEERING (IWBBIO 2015), PT II	2015		1
Risk-Driven Security Metrics Development for an e-Health IoT Application	Savola, Reijo M.; Savolainen, Pekka; Evesti, Antti; Abie, Habtamu; Sihvonen, Markus	2015 INFORMATION SECURITY FOR SOUTH AFRICA - PROCEEDINGS OF THE ISSA 2015 CONFERENCE	2015		1
Risk-Driven Vulnerability Testing: Results from eHealth Experiments Using Patterns and Model-Based Approach	Vernotte, Alexandre; Botea, Cornel; Legeard, Bruno; Molnar, Arthur; Peureux, Fabien	RISK ASSESSMENT AND RISK-DRIVEN TESTING	2015		1
Electronic Medical Records Adoption and Use Understanding the Barriers and the Levels of Adoption for Physicians in the USA	El-Yafouri, Raghid; Klieb, Leslie	2014 IEEE 16TH INTERNATIONAL CONFERENCE ON E-HEALTH NETWORKING, APPLICATIONS AND SERVICES (HEALTHCOM)	2014		1
A Sudden Infant Death Prevention System for Babies	Fonseca, Angelo M.; Horta, Edgar T.; Sendra, Sandra; Rodrigues, Joel J. P. C.; Moutinho, J. A. F.	2014 IEEE 16TH INTERNATIONAL CONFERENCE ON E-HEALTH NETWORKING, APPLICATIONS AND SERVICES (HEALTHCOM)	2014		1
Multinational surveys for monitoring eHealth policy implementations - usefulness and pitfalls	Gilstad, Heidi; Faxvaag, Arild; Hypponen, Hannele; Koch, Sabine; Nohr, Christian; Skauli, Kristian	E-HEALTH - FOR CONTINUITY OF CARE	2014		1

A Framework for Evaluating and Utilizing Medical Terminology Mappings	Hussain, Sajjad; Sun, Hong; Sinaci, Anil; Erturkmen, Gokce Banu Laleci; Mead, Charles; Gray, Alasdair J. G.; McGuinness, Deborah L.; Prud'Hommeaux, Eric; Daniel, Christel; Forsberg, Kerstin	E-HEALTH - FOR CONTINUITY OF CARE	2014		1
Mapping French terms in a Belgian guideline on heart failure to international classifications and nomenclatures: the devil is in the detail.	Jamoulle, Marc; Cardillo, Elena; Roumier, Joseph; Warnier, Maxime; Vander Stichele, Robert	Informatics in primary care	2014	4	1
PHR Revisioned - Navigating in the Personal Health Space	Lahtiranta, Janne; Nurminen, Markku I.	ICT AND SOCIETY	2014		1
Securing Access to Sensitive RDF Data	Papakonstantinou, V.; Flouris, G.; Fundulaki, I.; Kondylakis, H.	SEMANTIC WEB: ESWC 2014 SATELLITE EVENTS	2014		1
Machine Beauty - Should It Inspire eHealth Designers?	Rissanen, Marjo	HEALTH INFORMATION SCIENCE, HIS 2014	2014		1
Trust-based information system architecture for personal wellness	Ruotsalainen, Pekka; Nykanen, Pirkko; Seppala, Antto; Blobel, Bernd	E-HEALTH - FOR CONTINUITY OF CARE	2014		1
A Distributed Service-Based System for Homecare Self-Management	Taweel, Adel; Barakat, Lina; Miles, Simon	ON THE MOVE TO MEANINGFUL INTERNET SYSTEMS: OTM 2014 WORKSHOPS	2014		1
A Protocol Architecture for Energy Efficient and Pervasive eHealth Systems	Tennina, S.; Di Renzo, M.; Kartsakli, E.; Graziosi, F.; Lalos, A. S.; Antonopoulos, A.; Mekikis, P. V.; Alonso, L.; Verikoukis, C.	2014 IEEE-EMBS INTERNATIONAL CONFERENCE ON BIOMEDICAL AND HEALTH INFORMATICS (BHI)	2014		1
Improving Health Care Service Delivery with A National Code Service	Vuokko, Riikka; Makela-Bengs, Paivi; Harkonen, Mikko	E-HEALTH - FOR CONTINUITY OF CARE	2014		1
Hadron therapy information sharing prototype	Roman, Faustin Laurentiu; Abler, Daniel; Kanellopoulos, Vassiliki; Amoros, Gabriel; Davies, Jim; Dosanjh, Manjit; Jena, Raj; Kirkby, Norman; Peach, Ken; Salt, Jose	JOURNAL OF RADIATION RESEARCH	2013		1

PhysioDroid: an app for physiological data monitoring	Banos, Oresti; Damas, Miguel; Gloessekoetter, Peter; Hermes, Andreas; Mende, Hendrik; Pomares, Hector; Rojas, Ignacio	PROCEEDINGS IWBBIO 2013: INTERNATIONAL WORK-CONFERENCE ON BIOINFORMATICS AND BIOMEDICAL ENGINEERING	2013		1
A Risk-Driven Security Analysis and Metrics Development for WSN-MCN Router	Frantti, Tapio; Hietalahti, Hannu; Savola, Reijo	2013 INTERNATIONAL CONFERENCE ON ICT CONVERGENCE (ICTC 2013): FUTURE CREATIVE CONVERGENCE TECHNOLOGIES FOR NEW ICT ECOSYSTEMS	2013		1
Governance of Extended Lifecycle in Large-Scale eHealth Initiatives: Analyzing Variability of Enterprise Architecture Elements	Mykkanen, Juha; Virkanen, Hannu; Tuomainen, Mika	MEDINFO 2013: PROCEEDINGS OF THE 14TH WORLD CONGRESS ON MEDICAL AND HEALTH INFORMATICS, PTS 1 AND 2	2013		1
National clinical portal programme: What information do doctors want?	Strachan, K.; Kelly, C.	SCOTTISH MEDICAL JOURNAL	2011	3	1
Large-scale eHealth Systems	Hypponen, Hannele; Viitanen, Johanna; Reponen, Jarmo; Doupi, Persephone; Jormanainen, Vesa; Laaveri, Tinja; Vanska, Jukka; Winblad, Ilkka; Hamalainen, Paivi	PROCEEDINGS OF THE THIRD INTERNATIONAL CONFERENCE ON EHEALTH, TELEMEDICINE, AND SOCIAL MEDICINE (ETELEMED 2011)	2011		1
Changing Nature of Best Practices in eHealth	Lahtiranta, Janne	NORDIC CONTRIBUTIONS IN IS RESEARCH	2011		1
Data Privacy Preservation in Telemedicine : The PAIRSE Project	Nageba, Ebrahim; Defude, Bruno; Morvan, Franck; Ghedira, Chirine; Fayn, Jocelyne	USER CENTRED NETWORKED HEALTH CARE	2011		1
eHealth and knowledge management: new medical care settings for an excellent health system	Novillo-Ortiz, David	PROFESIONAL DE LA INFORMACION	2010	3	1
Innovation in Health Care Technology: Is it part of the problem	Colas, Javier; Guillen, Alejandra; Moreno, Rafael	2010 ANNUAL INTERNATIONAL CONFERENCE OF THE IEEE	2010		1



or part of the solution? eHealth gives the answer		ENGINEERING IN MEDICINE AND BIOLOGY SOCIETY (EMBC)			
A Dynamic Security Framework for Ambient Intelligent Systems: A Smart-Home Based eHealth Application	Compagna, Luca; El Khoury, Paul; Massacci, Fabio; Saidane, Ayda	TRANSACTIONS ON COMPUTATIONAL SCIENCE X: SPECIAL ISSUE ON SECURITY IN COMPUTING, PT I	2010		1
An Automatic Approach to Generate XML schemas from Relational Models	Jumaa, Hossam; Fayn, Jocelyne; Rubel, Paul	2010 12TH INTERNATIONAL CONFERENCE ON COMPUTER MODELLING AND SIMULATION (UKSIM)	2010		1
Exploiting Personal Health Records in Automating Information Therapy	Puustjarvi, Juha; Puustjarvi, Leena	SECOND INTERNATIONAL CONFERENCE ON EHEALTH, TELEMEDICINE, AND SOCIAL MEDICINE: ETELEMED 2010, PROCEEDINGS	2010		1
HL7's Comprehensive Standards Set and Its International Collaboration for Enabling Semantically Interoperable eHealth and pHealth Solutions	Blobel, Bernd; Chronaki, Catherine; Stegwee, Robert; Grain, Heather; Hammond, William E.; Jaffe, Charles; Kalra, Dipak; Koehn, Marc; Macary, Francois; Sabutsch, Stefan; Sheetham, Edward; Schulz, Stefan; Tan, Michael	MEDICAL INFORMATICS IN A UNITED AND HEALTHY EUROPE	2009		1
Knowledge Engineering as a support for building an Actor Profile Ontology for Integrating Home-Care Systems	Gibert, Karina; Valls, Aida; Riano, David	EHEALTH BEYOND THE HORIZON - GET IT THERE	2008		1
ICT for patient safety: Towards a European research roadmap	Stroetmann, Veli N.; Spichtinger, Daniel; Stroetmann, Karl A.; Thierry, Jean Pierre	BIOLOGICAL AND MEDICAL DATA ANALYSIS, PROCEEDINGS	2006		1
Empowering humanitarian medical development using grid technology	Gonzales, J; Pomel, S; Breton, V; Clot, B; Gutknecht, IL; Irthum, B; Legre, Y	METHODS OF INFORMATION IN MEDICINE	2005	2	1
eHealth in Finland: present status and future trends.	Doupi, Persephone; Ruotsalainen, Pekka	International journal of circumpolar health	2004	4	1

A review on video-based active and assisted living technologies for automated lifelogging	Climent-Perez, Pau; Spinsante, Susanna; Mihailidis, Alex; Florez-Revuelta, Francisco	EXPERT SYSTEMS WITH APPLICATIONS	2020		0
User Centered Design to Improve Information Exchange in Diabetes Care Through eHealth : Results from a Small Scale Exploratory Study.	Fico, Giuseppe; Martinez-Millana, Antonio; Leuteritz, Jan-Paul; Fioravanti, Alessio; Beltran-Jaunsaras, Maria Eugenia; Traver, Vicente; Arredondo, Maria Teresa	Journal of medical systems	2019	1	0
Sensor Technologies for Caring People with Disabilities.	Garcia-Penalvo, Francisco Jose; Franco-Martin, Manuel	Sensors (Basel, Switzerland)	2019	22	0
A two-stage deep learning approach for extracting entities and relationships from medical texts.	Suarez-Paniagua, Victor; Rivera Zavala, Renzo M; Segura-Bedmar, Isabel; Martinez, Paloma	Journal of biomedical informatics	2019		0
A Research Roadmap: Connected Health as an Enabler of Cancer Patient Support	Ruiz Signorelli, Gabriel; Lehocki, Fedor; Fernandez, Matilde Mora; O'Neill, Gillian; O'Connor, Dominic; Brennan, Louise; Monteiro-Guerra, Francisco; Rivero-Rodriguez, Alejandro; Hors-Fraile, Santiago; Munoz-Penas, Juan; Dalmau, Merce Bonjorn; Ll, Jorge Mota; Oliveira, Ricardo B.; Mrinakova, Bela; Putekova, Silvia; Muro, Naiara; Zambrana, Francisco; Garcia-Gomez, Juan M.	JOURNAL OF MEDICAL INTERNET RESEARCH	2019	10	0
MSCopilot, a new multiple sclerosis self-assessment digital solution: results of a comparative study versus standard tests	Maillart, E.; Labauge, P.; Cohen, M.; Maarouf, A.; Vukusic, S.; Donze, C.; Gallien, P.; De Seze, J.; Bourre, B.; Moreau, T.; Louapre, C.; Mayran, P.; Bieuvelet, S.; Vallee, M.; Bertillot, F.; Klaeyle, L.; Argoud, A-L; Zinai, S.; Tourbah, A.	EUROPEAN JOURNAL OF NEUROLOGY	2019		0
Identifying Frameworks for Validation and Monitoring of Consensual Behavioral Intervention Technologies: Narrative Review	Carbonnel, Francois; Ninot, Gregory	JOURNAL OF MEDICAL INTERNET RESEARCH	2019	10	0
Analysis of the Recomposition of Norms and Representations in the Field of Psychiatry and Mental	Morgieva, Margot; Sebbane, Deborah; De Rosario, Bianca; Demassiet, Vincent; Kabbaj, Soraya; Briffault, Xavier; Roelandt, Jean-Luc	JMIR MENTAL HEALTH	2019	10	0

Health in the Age of Electronic Mental Health: Qualitative Study					
Improving the Health of Individuals With Cerebral Palsy: Protocol for the Multidisciplinary Research Program MOVING ON WITH CP	Alriksson-Schmidt, Ann; Jarl, Johan; Rodby-Bousquet, Elisabet; Josenby, Annika Lundkvist; Westbom, Lena; Himmelmann, Kate; Stadskeiv, Kristine; Odman, Pia; Svensson, Ingrid; Antfolk, Christian; Malesevic, Nebojsa; Jeglinsky, Ira; Saha, Sanjib; Hagglund, Gunnar	JMIR RESEARCH PROTOCOLS	2019	10	0
Embracing technology? Health and Social Care professionals' attitudes to the deployment of e-Health initiatives in elder care services in Catalonia and Ireland	Lolich, Luciana; Ricco, Isabella; Deusdad, Blanca; Timonen, Virpi	TECHNOLOGICAL FORECASTING AND SOCIAL CHANGE	2019		0
Digital Health Transformation of Integrated Care in Europe: Overarching Analysis of 17 Integrated Care Programs	Baltaxe, Erik; Cypionka, Thomas; Kraus, Markus; Reiss, Miriam; Askildsen, Jan Erik; Grenkovic, Renata; Linden, Tord Skogedal; Pitter, Janos Gyorgy; Rutten-van Molken, Maureen; Solans, Oscar; Stokes, Jonathan; Struckmann, Verena; Roca, Josep; Cano, Isaac	JOURNAL OF MEDICAL INTERNET RESEARCH	2019	9	0
Healthcare professionals' proposed eHealth needs in elective primary fast-track hip and knee arthroplasty journey: A qualitative interview study	Jansson, Miia Marika; Harjumaa, Marja; Puhto, Ari-Pekka; Pikkarainen, Minna	JOURNAL OF CLINICAL NURSING	2019	23-24	0
Telemonitoring of Crohn's Disease and Ulcerative Colitis (TECCU): Cost-Effectiveness Analysis	Del Hoyo, Javier; Nos, Pilar; Bastida, Guillermo; Faubel, Raquel; Munoz, Diana; Garrido-Marin, Alejandro; Valero-Perez, Elena; Bejar-Serrano, Sergio; Aguas, Mariam	JOURNAL OF MEDICAL INTERNET RESEARCH	2019	9	0
Dynamic network slicing management of multimedia scenarios for future remote healthcare	Celdran, Alberto Huertas; Gil Perez, Manuel; Garcia Clemente, Felix J.; Ippoliti, Fabrizio; Martinez Perez, Gregorio	MULTIMEDIA TOOLS AND APPLICATIONS	2019	17	0

Mobile Conversational Interface for Stuttering Treatment	Griol, David; Font, Javier; Callejas, Zoraida	PROCESAMIENTO DEL LENGUAJE NATURAL	2019	63	0
A guided internet-delivered individually-tailored ACT-influenced cognitive behavioural intervention to improve psychosocial outcomes in breast cancer survivors (iNNOVBC): Study protocol	Mendes-Santo, Cristina; Weiderpass, Elisabete; Santana, Rui; Andersson, Gerhard	INTERNET INTERVENTIONS-THE APPLICATION OF INFORMATION TECHNOLOGY IN MENTAL AND BEHAVIOURAL HEALTH	2019		0
A multimodal conversational coach for active ageing based on sentient computing and m-health	Griol, David; Manuel Molina, Jose; Sanchis, Araceli	EXPERT SYSTEMS	2019		0
A systematic and comprehensive review of internet use in cancer patients: Psychological factors	Lleras de Frutos, Maria; Casellas-Grau, Anna; Sumalla, Enric C.; de Gracia, Marta; Borrás, Josep M.; Ochoa Arnedo, Cristian	PSYCHO-ONCOLOGY	2019		0
Clinical Leaders' Self-Perceived eHealth Competencies in the Implementation of New eHealth Services.	Kujala, Sari; Heponiemi, Tarja; Hilama, Pirjo	Studies in health technology and informatics	2019		0
User Driven Design: First Step in Involving Healthcare Consumers and Clinicians in Developing a Collaborative Platform to Prevent Cardiovascular Diseases.	Pelayo, Sylvia; Schiro, Jessica; Gautier, Pierre-Francois; Jaulent, Marie-Christine; Marcilly, Romaric	Studies in health technology and informatics	2019		0
What do healthcare professionals need to turn risk models for type 2 diabetes into usable computerized clinical decision support systems? Lessons learned from the MOSAIC project	Fico, Giuseppe; Hernandez, Liss; Cancela, Jorge; Dagliati, Arianna; Sacchi, Lucia; Martinez-Millana, Antonio; Posada, Jorge; Manero, Lidia; Verdu, Jose; Facchinetti, Andrea; Ottaviano, Manuel; Zarkogianni, Konstantia; Nikita, Konstantina; Groop, Leif; Gabriel-Sanchez, Rafael; Chiovato, Luca; Traver, Vicente; Francisco Merino-Torres,	BMC MEDICAL INFORMATICS AND DECISION MAKING	2019	1	0

	Juan; Cobelli, Claudio; Bellazzi, Riccardo; Teresa Arredondo, Maria				
Experienced time pressure and stress: electronic health records usability and information technology competence play a role	Vehko, Tuulikki; Hypponen, Hannele; Puttonen, Sampsa; Kujala, Sari; Ketola, Eeva; Tuukkanen, Johanna; Aalto, Anna-Mad; Heponiemi, Tarja	BMC MEDICAL INFORMATICS AND DECISION MAKING	2019	1	0
Factors Related to Health Informatics Competencies for Nurses-Results of a National Electronic Health Record Survey	Kinnunen, Ulla-Mari; Heponiemi, Tarja; Rajalahti, Elina; Ahonen, Outi; Korhonen, Teija; Hypponen, Hannele	CIN-COMPUTERS INFORMATICS NURSING	2019	8	0
Health Professionals' Perceptions of Information Quality in the Health Village Portal.	Rosenlund, Milla; Kivekas, Eija; Mikkonen, Santtu; Arvonen, Sirpa; Reponen, Jarmo; Saranto, Kaija	Studies in health technology and informatics	2019		0
Utilizing the Advances in Digital Health Solutions to Manage Care in Cancer Patients	Charalambous, Andreas	ASIA-PACIFIC JOURNAL OF ONCOLOGY NURSING	2019	3	0
Original Study Older Adults' Reasons for Participating in an eHealth Prevention Trial: A Cross-Country, Mixed-Methods Comparison	Coley, Nicola; Rosenberg, Anna; van Middelaar, Tessa; Soulier, Alexandra; Barbera, Mariagnese; Guillemont, Juliette; Steensma, Jaap; Igier, Valerie; Eskelinen, Marjo; Soininen, Hilkka; van Charante, Eric Moll; Richard, Edo; Kivipelto, Miia; Andrieu, Sandrine; Sindi, Shireen; Solomon, Alina; Hartmann, Tobias; Brayne, Carol; van Gool, Pim; Beishuizen, Cathrien; Jongstra, Susan; van Wanrooij, Lennard; Hoevenaars-Blom, Marieke; Ngandu, Tiia; Mangiasche, Francesca; Meiller, Yannick; van de Groep, Bram	JOURNAL OF THE AMERICAN MEDICAL DIRECTORS ASSOCIATION	2019	7	0
Efficacy and Usability of eHealth Technologies in Stroke Survivors for Prevention of a New Stroke and	Ortiz-Fernandez, Leire; Sagastagoya Zabala, Joana; Gutierrez-Ruiz, Agustin; Imaz-Ayo, Natale; Alava-Menica, Ander; Arana-Arri, Eunete	Methods and protocols	2019	2	0

Improvement of Self-Management: Phase III Randomized Control Trial.					
The Effects of the Digital Platform Support Monitoring and Reminder Technology for Mild Dementia (SMART4MD) for People With Mild Cognitive Impairment and Their Informal Carers: Protocol for a Pilot Randomized Controlled Trial	Anderberg, Peter; Barnestein-Fonseca, Pilar; Guzman-Parra, Jose; Garolera, Maite; Quintana, Maria; Mayoral-Cleries, Fermin; Lemmens, Evi; Berglund, Johan Sanmartin	JMIR RESEARCH PROTOCOLS	2019	6	0
Integrating nurses' experiences with supporting behaviour change for cardiovascular prevention into a self-management internet platform in Finland and the Netherlands: a qualitative study	Beishuizen, Cathrien R. L.; Akenine, Ulrika; Barbera, Mariagnese; Rosenberg, Anna; Pour, Mandana Fallah; Richard, Edo; Soininen, Hilkka; Mangialasche, Francesca; Kivipelto, Miia; Pols, A. Jeannette; van Charante, Eric Moll	BMJ OPEN	2019	6	0
Cimind: A phonetic-based tool for multilingual named entity recognition in biomedical texts.	Cabot, Chloe; Darmoni, Stefan; Soualmia, Lina F	Journal of biomedical informatics	2019		0
EHEALTH CONSULTATIONS IN RHEUMATOLOGY MANAGED BY NURSING. SPANISH NATIONAL DESCRIPTIVE STUDY	Garcia Diaz, Silvia	ANNALS OF THE RHEUMATIC DISEASES	2019		0
The European cross-border health data exchange roadmap: Case study in the Italian setting.	Nalin, Marco; Baroni, Ilaria; Faiella, Giuliana; Romano, Maria; Matrisciano, Flavia; Gelenbe, Erol; Martinez, David Mari; Dumortier, Jos; Natsiavas, Pantelis; Votis, Kostas; Koutkias, Vassilis; Tzovaras, Dimitrios; Clemente, Fabrizio	Journal of biomedical informatics	2019		0
Implantable systems - Retrospective tutorial review	Sobot, Robert	MICROELECTRONICS JOURNAL	2019		0

Enable Advanced QoS-Aware Network Slicing in 5G Networks for Slice-Based Media Use Cases	Wang, Qi; Alcaraz-Calero, Jose; Ricart-Sanchez, Ruben; Weiss, Maria Barros; Gavras, Anastasius; Nikaein, Navid; Vasilakos, Xenofon; Giacomo, Bernini; Pietro, Giardina; Roddy, Mark; Healy, Michael; Walsh, Paul; Thuy Truong; Bozakov, Zdravko; Koutsopoulos, Konstantinos; Neves, Pedro; Patachia-Sultanoiu, Cristian; Iordache, Marius; Oproiu, Elena; Ben Yahia, Imen Grida; Angelo, Ciriaco; Zotti, Cosimo; Celozzi, Giuseppe; Morris, Donal; Figueiredo, Ricardo; Lorenz, Dean; Spadaro, Salvatore; Agapiou, George; Aleixo, Ana; Lomba, Cipriano	IEEE TRANSACTIONS ON BROADCASTING	2019	2	0
Psychometric properties of the Hungarian version of the eHealth Literacy Scale	Zrubka, Zsombor; Hajdu, Otto; Rencz, Fanni; Baji, Petra; Gulacsi, Laszlo; Pentek, Marta	EUROPEAN JOURNAL OF HEALTH ECONOMICS	2019		0
Exploring Associations Between the Self-Reported Values, Well-Being, and Health Behaviors of Finnish Citizens: Cross-Sectional Analysis of More Than 100,000 Web-Survey Responses	Honka, Anita Marianne; Helander, Elina; Pavel, Misha; Jimison, Holly; Mustonen, Pekka; Korhonen, Ilkka; Ermes, Miikka	JMIR MENTAL HEALTH	2019	4	0
The Role of Frontline Leaders in Building Health Professional Support for a New Patient Portal: Survey Study	Kujala, Sari; Horhammer, Iiris; Heponiemi, Tarja; Josefsson, Kim	JOURNAL OF MEDICAL INTERNET RESEARCH	2019	3	0
Management priorities of digital health service start-ups in California	Muhos, Matti; Saarela, Martti; Foit, Delbert, Jr.; Rasochova, Lada	INTERNATIONAL ENTREPRENEURSHIP AND MANAGEMENT JOURNAL	2019	1	0
Analysis of eHealth knowledge discovery systems in the TASS 2018 Workshop	Piada-Morffis, Alejandro; Gutierrez, Yoan; Estevez-Velarde, Suilan; Almeida-Cruz, Yudivian; Montoyo, Andres; Munoz, Rafael	PROCESAMIENTO DEL LENGUAJE NATURAL	2019	62	0
Implementing eHealth in Kidney Transplantation in Finland	Savikko, J.; Rauta, V.	TRANSPLANTATION PROCEEDINGS	2019	2	0

The Obemat2.0 Study: A Clinical Trial of a Motivational Intervention for Childhood Obesity Treatment	Luque, Veronica; Feliu, Albert; Escribano, Joaquin; Ferre, Natalia; Flores, Gemma; Monne, Raquel; Gutierrez-Marin, Desiree; Guillen, Nuria; Munoz-Hernando, Judit; Zaragoza-Jordana, Marta; Gispert-Llaurado, Mariona; Rubio-Torrents, Carme; Nunez-Roig, Merce; Alcazar, Mireia; Ferre, Raimon; Basora, Josep M.; Hsu, Pablo; Alegret-Basora, Clara; Arasa, Francesc; Venables, Michelle; Singh, Priya; Closa-Monasterolo, Ricardo	NUTRIENTS	2019	2	0
Implementation of a multicomponent telemonitoring intervention to improve nutritional status of community-dwelling older adults: a process evaluation	van Doorn-van Atten, Marije N.; de Groot, Lisette C. P. G. M.; Collet Romea, Albert; Schwartz, Simon; de Vries, Jeanne H. M.; Haveman-Nies, Annemien	PUBLIC HEALTH NUTRITION	2019	2	0
Impact Of eHealth in Allergic Diseases and Allergic Patients	Alvarez-Perea, A.; Sanchez-Garcia, S.; Cano R, Munoz; Antolin-Amerigo, D.; Tsilochristou, O.; Stukus, D. R.	JOURNAL OF INVESTIGATIONAL ALLERGOLOGY AND CLINICAL IMMUNOLOGY	2019	2	0
DIALCAT: Diabetes as an Accelerator of Cognitive Impairment and Alzheimer's Disease, Comprehensive Approach and Adherence to Treatment	Barrue, Cristian; Vila, Roger; Martinez, Antonio B.; Martin, Mario; Vazquez-Salceda, Javier; Simo, Rafael; Barroso, Marta; Cortes, Ulises	COMPUTACION Y SISTEMAS	2019	2	0
Micro ad-hoc Health Social Networks (uHSN). Design and evaluation of a social-based solution for patient support	Blanco, T.; Casas, R.; Marco, A.; Martinez, I.	JOURNAL OF BIOMEDICAL INFORMATICS	2019		0
Adaptive Range-based Anomaly Detection in Drone-assisted Cellular Networks	Boucetta, Cherifa; Nour, Boubakr; Hammami, Seif Eddine; Moun gla, Hassine; Afifi, Hossam	2019 15TH INTERNATIONAL WIRELESS COMMUNICATIONS & MOBILE COMPUTING CONFERENCE (IWCMC)	2019		0
Design, Understanding and Usability Evaluation of Connected Devices in	Chaniaud, Noemie; Loup-Escande, Emilie; Megalakaki, Olga	PROCEEDINGS OF THE 20TH CONGRESS OF THE INTERNATIONAL	2019		0



the Field of Health: Contribution of Cognitive Psychology and Ergonomics		ERGONOMICS ASSOCIATION (IEA 2018), VOL I: HEALTHCARE ERGONOMICS			
Revolutionizing Healthcare with IoT and Cognitive, Cloud-based Telemedicine	Garai, Abel; Pentek, Istvan; Adamko, Attila	ACTA POLYTECHNICA HUNGARICA	2019	2	0
Encouraging the Use of eHealth Services: A Survey of Patients' Experiences.	Karisalmi, Nina; Kaipio, Johanna; Kujala, Sari	Studies in health technology and informatics	2019		0
THE RAPID COMMUNITY COGNITIVE SCREENING PROGRAMME (RAPCOG): DEVELOPING THE PORTUGUESE VERSION OF THE QUICK MILD COGNITIVE IMPAIRMENT (QMCI-P) SCREEN AS PART OF THE EIP ON AHA TWINNING SCHEME	Machado dos Santos, P.; O'Caoimh, R.; Svendrovski, A.; Casanovas, C.; Orfila Pernas, F.; Illario, M.; Molloy, W.; Paul, C.	TRANSLATIONAL MEDICINE AT UNISA	2019		0
Therapeutic adherence in patients with diabetes mellitus type II and use of basic mobile technology: a systematic review	Martinez Mateo, Minerva; Garcia Herrera, Daniel	REVISTA ESPANOLA DE COMUNICACION EN SALUD	2019	1	0
eHealth and mHealth	Moss, Robert John; Sule, Andras; Kohl, Stephanie	EUROPEAN JOURNAL OF HOSPITAL PHARMACY-SCIENCE AND PRACTICE	2019	1	0
Patients as co-designers of the STARR system prototype	Ortiz-Fernandez, Leire; Alava-Menica, Ander; Marti-Carrera, Jordi; Garcia-Fernandez, Ruben; Orcajo-Lago, Janire; Arana-Arri, Eunete; Escobal-Gonzalo, Javier	PROCEEDINGS OF THE 13TH EAI INTERNATIONAL CONFERENCE ON PERVASIVE COMPUTING TECHNOLOGIES FOR HEALTHCARE (PERVASIVEHEALTH 2019)	2019		0
Adequacy, virality and interaction of the information on YouTube related	Sanz-Lorente, Maria; Chorro Vicedo, Maria; Sanz-Valero, Javier; Wanden-Berghe, Carmina	ARS PHARMACEUTICA	2019	2	0

to the treatment of curable sexually transmitted diseases					
Time-to-Birth Prediction Models and the Influence of Expert Opinions	Vandewiele, Gilles; Dehaene, Isabelle; Janssens, Olivier; Ongenaes, Femke; De Backere, Femke; De Turck, Filip; Roelens, Kristien; Van Hoecke, Sofie; Demeester, Thomas	ARTIFICIAL INTELLIGENCE IN MEDICINE, AIME 2019	2019		0
Personalised eHealth intervention to increase physical activity and reduce sedentary behaviour in rehabilitation after cardiac operations: study protocol for the PACO randomised controlled trial (NCT03470246).	Vasankari, Ville; Halonen, Jari; Husu, Pauliina; Vaha-Ypya, Henri; Tokola, Kari; Suni, Jaana; Sievanen, Harri; Anttila, Vesa; Airaksinen, Juhani; Vasankari, Tommi; Hartikainen, Juha	BMJ open sport & exercise medicine	2019	1	0
Mobile applications related to multiple sclerosis: a systematic review	Zayas-Garcia, Sandra; Cano-de-la-Cuerda, Roberto	REVISTA DE NEUROLOGIA	2018	12	0
An analysis of evaluation campaigns in ad-hoc medical information retrieval: CLEF eHealth 2013 and 2014	Goeuriot, Lorraine; Jones, Gareth J. F.; Kelly, Liadh; Leveling, Johannes; Lupu, Mihai; Palotti, Joao; Zuccon, Guido	INFORMATION RETRIEVAL JOURNAL	2018	6	0
Impact of Mhealth and Ehealth Applications on Hemophilia Treatment Management	Santandreu Estelrich, Maria Margalida; Maria Sanchez-Raga, Jose; Palomero Massanet, Antonio; Galmes Sureda, Bernat; Delgado, Olga; Sampol, Antonia; Canaro, Mariana	BLOOD	2018		0
THE PLACE OF EHEALTH INTERVENTIONS IN THE MANAGEMENT PATHWAY OF INFLAMMATORY BOWEL DISEASE (IBD) PATIENTS: A SYSTEMATIC REVIEW	Atanasov, P.; Gauthier, A.; Cobos, D.	VALUE IN HEALTH	2018		0
Cost-Effective eHealth System Based on a Multi-Sensor System-on-Chip	Segura-Garcia, Jaume; Garcia-Pineda, Miguel; Tamarit-Tronch, Marta; Cibrian, Rosa M.; Salvador-Palmer, Rosario	ELECTRONICS	2018	9	0

Platform and Data Fusion in Cloud for Sport Activity Monitoring					
Ethics Certification of Health Information Professionals.	Kluge, Eike-Henner; Lacroix, Paulette; Ruotsalainen, Pekka	Yearbook of medical informatics	2018	1	0
A systematic review of the measurement properties of the European Organisation for Research and Treatment of Cancer In-patient Satisfaction with Care Questionnaire, the EORTC IN-PATSAT32	Neijenhuijs, Koen I.; Jansen, Femke; Aaronson, Neil K.; Bredart, Anne; Groenvold, Mogens; Holzner, Bernhard; Terwee, Caroline B.; Cuijpers, Pim; Verdonck-de Leeuw, Irma M.	SUPPORTIVE CARE IN CANCER	2018	8	0
Scholarly Influence of the Conference and Labs of the Evaluation Forum eHealth Initiative: Review and Bibliometric Study of the 2012 to 2017 Outcomes.	Suominen, Hanna; Kelly, Liadh; Goeuriot, Lorraine	JMIR research protocols	2018	7	0
Internet-based collation and processing of research data on pediatric healthcare. Wikipediatrics and online research	Ehrich, J.; Gerber-Grote, A.; Marg, W.; Werner, A.; Levy, C.	MONATSSCHRIFT KINDERHEILKUNDE	2018	6	0
Assessing presence in videoconference telepsychotherapies: A complementary qualitative study on breaks in telepresence and intersubjectivity co-construction processes	Haddouk, Lise; Bouchard, Stephane; Brivio, Eleonora; Galimberti, Carlo; Trognon, Alain	ANNUAL REVIEW OF CYBERTHERAPY AND TELEMEDICINE	2018		0
Identifying Biomedical and Health Informatics Competencies in Higher Education Curricula.	Ahonen, Outi; Kinnunen, Ulla-Mari; Lejonqvist, Gun-Britt; Apkalna, Baiba; Viitkar, Kersti; Saranto, Kaija	Studies in health technology and informatics	2018		0

Bots in messaging platforms, a new paradigm in healthcare delivery: application to custom prescription in dermatology	Alesanco, A.; Sancho, J.; Gilaberte, Y.; Abarca, E.; Garcia, J.	EMBECE & NBC 2017	2018		0
Artificial Intelligence Contribution to eHealth Application	Cabestany, Joan; Rodriguez-Martin, Daniel; Perez, Carlos; Santa, Albert	PROCEEDINGS OF THE 25TH INTERNATIONAL CONFERENCE MIXED DESIGN OF INTEGRATED CIRCUITS AND SYSTEM (MIXDES 2018)	2018		0
Positive cognitive restructuring through an App based on context messages	Conesa, Jordi; Ganan, David; Perez-Navarro, Antoni; Nieto, Ruben; Ruiz, Gemma; Saigi, Francesc; Sora, Beatriz	2018 IEEE/ACM INTERNATIONAL CONFERENCE ON ADVANCES IN SOCIAL NETWORKS ANALYSIS AND MINING (ASONAM)	2018		0
Early Stage Health Technology Assessment of eHealth solution for Diabetes. Experience on the usage of the MAFEIP tool: data collection	Fico, G.; Lopez-Valverde, M.; Arredondo, M. T.	EMBECE & NBC 2017	2018		0
CAMEI COOPERATION ACTION PLAN: A SYSTEMATIC DOCUMENTATION TOOL OF INTERNATIONAL COLLABORATION ON FOSTERING IT SKILLS FOR HEALTHCARE ENHANCING SHARE AND REUSE OF DIGITAL EDUCATION RESOURCES	Konstantinidis, S. Th.; Zary, N.; Traver, V.; Bamidis, P. D.	12TH INTERNATIONAL TECHNOLOGY, EDUCATION AND DEVELOPMENT CONFERENCE (INTED)	2018		0
Energy-Aware Placement for IoT-Service Function Chain	Kouah, Riad; Alleg, Abdelhamid; Laraba, Abir; Ahmed, Toufik	2018 IEEE 23RD INTERNATIONAL WORKSHOP ON COMPUTER AIDED MODELING AND DESIGN OF COMMUNICATION LINKS AND NETWORKS (CAMAD)	2018		0

Mobility Supported Energy Efficient Routing Protocol for IoT based Healthcare Applications	Lazarevska, Maja; Farahbakhsh, Reza; Shakya, Nikesh Man; Crespi, Noel	2018 IEEE CONFERENCE ON STANDARDS FOR COMMUNICATIONS AND NETWORKING (IEEE CSCN)	2018		0
The contribution of eHealth in closing gaps in primary health care in selected countries of Latin America and the Caribbean	Lima-Toivanen, Maria; Pereira, Rubens Martins	REVISTA PANAMERICANA DE SALUD PUBLICA-PAN AMERICAN JOURNAL OF PUBLIC HEALTH	2018		0
Integrated IoT intelligent system for the automatic detection of cardiac variability.	Martinez-Millana, Antonio; Palao, Carmen; Fernandez-Llatas, Carlos; de Carvalho, Paulo; Bianchi, Anna M; Traver, Vicente	Conference proceedings : ... Annual International Conference of the IEEE Engineering in Medicine and Biology Society. IEEE Engineering in Medicine and Biology Society. Annual Conference	2018		0
E-salud en las heridas crónicas. Posicionamiento del GNEAUPP. E-health in chronic wounds. Positioning of GNEAUPP	Ramos-Morcillo, Antonio Jesús; Fernández-Salazar, Serafín; López-Casanova, Pablo; Ruzafa-Martínez, María	Gerokomos	2018	1	0
Intensity Thinking as a Shared Challenge in Consumer-Targeted eHealth	Rissanen, Marjo	HEALTH INFORMATION SCIENCE (HIS 2018)	2018		0
Edge and Cluster Computing as Enabling Infrastructure for Internet of Medical Things	Ritrovato, Pierluigi; Xhafa, Fatos; Giordano, Andrea	PROCEEDINGS 2018 IEEE 32ND INTERNATIONAL CONFERENCE ON ADVANCED INFORMATION NETWORKING AND APPLICATIONS (AINA)	2018		0
Treatment of metabolic syndrome and quality of life in patients with schizophrenia: a systematic review	Ruiz-Perez, Maica; Llistar-Verdu, Salvador; Farras-Permanyer, Laia; Gomez-Hinojosa, Tary	ALOMA-REVISTA DE PSICOLOGIA CIENCIAS DE L EDUCACIO I DE L ESPORT	2018	1	0
Two examples of online eHealth platforms for supporting people	Solachidis, Vassilis; Paliokas, Ioannis; Vretos, Nicholas; Votis, Konstantinos; Cortes, Ulises; Tzovaras, Dimitrios	11TH ACM INTERNATIONAL CONFERENCE ON PERSVASIVE	2018		0


living with cognitive impairments and their caregivers		TECHNOLOGIES RELATED TO ASSISTIVE ENVIRONMENTS (PETRA 2018)			
eHealth Solutions for the Integrated Healthcare	Vanagas, Giedrius; Engelbrecht, Rolf; Damasevicius, Robertas; Suomi, Reima; Solanas, Agusti	JOURNAL OF HEALTHCARE ENGINEERING	2018		0
On the Mobility Management Performance of NEMO-based Nested Wireless Body Area Networks	Varga, Norbert; Bokor, Laszlo; Ognjanovic, Ivana; Sendelj, Ramo	2018 23RD INTERNATIONAL SCIENTIFIC-PROFESSIONAL CONFERENCE ON INFORMATION TECHNOLOGY (IT)	2018		0
A Component-Based Approach for Securing Indoor Home Care Applications.	Agirre, Aitor; Armentia, Aintzane; Estevez, Elisabet; Marcos, Marga	Sensors (Basel, Switzerland)	2017	1	0
Telecommunications companies and health in West Africa: the issues	Ankri, R.; Maroune, M. -H	MEDECINE ET SANTE TROPICALES	2017	4	0
Assessing eHealth skills across Europeans (vol 6, pg 161, 2017)	Rosalia Vicente, Maria; Madden, Gary	HEALTH POLICY AND TECHNOLOGY	2017	3	0
Interet etenjeux dela e-sante dans ladepression.. [Benefits and challenges of eHealth in depression].	Mekaoui, Lila	Soins. Psychiatrie	2017	311	0
On Line Service Composition in the Integrated Clinical Environment for eHealth and Medical Systems	Garcia-Valls, Marisol; Eddine Touahria, Imad	SENSORS	2017	6	0
IMPLEMENTING TELEMEDICINE, EHEALTH AND TELEPHONIC NURSING ASSISTANCE IN SPAIN	Sarria Guerrero, Jose Antonio; Guix Comellas, Eva Maria; Isla Pera, Maria Pilar	REVISTA ROL DE ENFERMERIA	2017	4	0
Interaction-dependent e-Health hub-software adaptation to cloud-based electronic health records	Adamko, Attila; Garai, Abel; Pentek, Istvan	2017 8TH IEEE INTERNATIONAL CONFERENCE ON COGNITIVE INFOCOMMUNICATIONS (COGINFOCOM)	2017		0

Integrating a Dual Method on a General Architecture to Self-Adaptive Monitoring Systems	Balderas-Diaz, Sara; Benghazi, Kawtar; Garrido, Jose Luis; O'Hare, Gregory M. P.; Guerrero-Contreras, Gabriel	RECENT ADVANCES IN INFORMATION SYSTEMS AND TECHNOLOGIES, VOL 1	2017		0
Privacy Data Management and Awareness for Public Administrations: A Case Study from the Healthcare Domain	Diamantopoulou, Vasiliki; Angelopoulos, Konstantinos; Flake, Julian; Praitano, Andrea; Francisco Ruiz, Jose; Juerjens, Jan; Pavlidis, Michalis; Bonutto, Dimitri; Castillo Sanz, Andres; Mouratidis, Haralambos; Garcia Robles, Javier; Tozzi, Alberto Eugenio	PRIVACY TECHNOLOGIES AND POLICY, APF 2017	2017		0
An ICE compliant component model for medical systems development	Eddine Touahria, Imad; Garcia-Valls, Marisol; Khababa, Abdellah	2017 IEEE 41ST ANNUAL COMPUTER SOFTWARE AND APPLICATIONS CONFERENCE (COMPSAC), VOL 1	2017		0
Non-invasive Insole Optical fiber Sensor Architecture for monitoring foot anomalies	Fatima Domingues, M.; Tavares, Catia; Alberto, Nelia; Leita, Catia; Antunes, Paulo; Andre, Paulo; de Lima, Eduardo Rocon; Sucasas, Victor; Radwan, Ayman; Rodriguez, Jonathan	GLOBECOM 2017 - 2017 IEEE GLOBAL COMMUNICATIONS CONFERENCE	2017		0
Cloud-based eHealth Video Encoding System for Real Time Thermographic Streaming: Performance Evaluation	Garcia-Pineda, Miguel; Segura-Garcia, Jaume; Felici-Castell, Santiago; Rodrigues, Joel J. P. C.	2017 IEEE INTERNATIONAL CONFERENCE ON COMMUNICATIONS (ICC)	2017		0
eHealth in the future of medications management: personalisation, monitoring and adherence	Gonzalez Valdivieso, Maria	PHARMACEUTICAL CARE ESPANA	2017	4	0
Using Critical Incidents in Workshops to Inform eHealth Design	Gruenloh, Christiane; Haslwanter, Jean D. Hallewell; Kane, Bridget; Lee, Eunji; Lind, Thomas; Moll, Jonas; Rexhepi, Hanife; Scandurra, Isabella	HUMAN-COMPUTER INTERACTION - INTERACT 2017, PT I	2017		0
Blood glucose level prediction with improved parameter identification methods	Gyuk, Peter; Vassanyi, Istan; Kosa, Istvan	2017 IEEE 30TH NEUMANN COLLOQUIUM (NC)	2017		0
ICT Use in Family Caregiving of Elderly and Disabled Subjects	Hautala, Mia; Keranen, Niina S.; Leinonen, Eeva; Kangas, Maarit; Jamsa, Timo	EHEALTH 360 DEGREE	2017		0


Toward smart health care: Building a National Health Information Infrastructure (EESZT) in Hungary	Horvath, Lajos	2017 IEEE 30TH NEUMANN COLLOQUIUM (NC)	2017		0
Integrating Biomedical Sensor Data into a Simulation Learning Environment for Children Newly Diagnosed with Diabetes	Ibanez, Maria-Blanca; Escolar, Soledad; Iskandar, Ricardo; Viera, Karen; Delgado-Kloos, Carlos	JOURNAL OF UNIVERSAL COMPUTER SCIENCE	2017	6	0
Actions to Empower Digital Competences in Healthcare Workforce: A Qualitative Approach	Konstantinidis, Stathis Th.; Li, Sisi; Traver, Vicente; Zary, Nabil; Bamidis, Panagiotis D.	INFORMATICS EMPOWERS HEALTHCARE TRANSFORMATION	2017		0



## APPENDIX 2. Kick Off Meeting Presentation – State of the Art.




Valdecilla  
Instituto de Investigación Sanitaria IDIVAL




ES

PP6



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European Union  
European Regional  
Development Fund

State of the art in e-health in the partner countries

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**Paloma Gonzalez.** Project officer. IDIVAL. [innovacion4@idival.org](mailto:innovacion4@idival.org)

9 November 2019. Kick-off meeting

## State of the art in e-health in the partner countries



### INDEX:

- CONTEXT
- OBJECTIVE
- APPROACH
  - Survey
  - Success stories
  - International Funding Projects in eHealth
  - Publications
  - Regional / National policy
- WORK DISTRIBUTION
- OUTPUTS / RESULTS



PP6

State of the art in e-health in the partner countries

## CONTEXT

1

## Context

### Why this Project?

- Decreasing and ageing population
- Population living in rural or/and remote areas
- Availability of new health technologies
- Europe 2020 Strategy has the promotion of the Active and Healthy Aging as one of its priorities.
- Allow Independent life for the Aging population
- Innovation can help make the health sector more sustainable

1

## Context

### Need of the state of the art study:

- Demographic and societal Change
  - 45% increase >65y the next 20 years.
  - High interregional variability.
  - Big-city centric population distribution
- Identification and transference of good territorial policies  FI  HU  MT  FR  ES
- Interregional Exchange of information and experiences
- Need to re-think and re-planning the health services

1

## Context



### Global Observatory for eHealth

#### Global Observatory for eHealth

Global survey

Publications

eHealth policies

#### Launch of Atlas of eHealth country profiles 2015

Atlas of eHealth  
country profiles  
2015



The third global survey on eHealth conducted by the WHO Global Observatory for eHealth (GOe) has a special focus – the use of eHealth in support of universal health coverage. eHealth plays a vital role in supporting universal health coverage in a variety of ways relating to cost, access and quality of services. This Atlas presents data collected on 125 WHO Member States. The survey was undertaken between April and August 2015 and represents the most current information on the use of eHealth in these countries.

[Read more](#)

[Alphabetical list of the eHealth country profiles, 2015](#)

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<https://www.who.int/goe/en/>

## Context

**Indicator full name:** A national eHealth policy or strategy exists

**Unit:** number of responses

**Dimensions:**

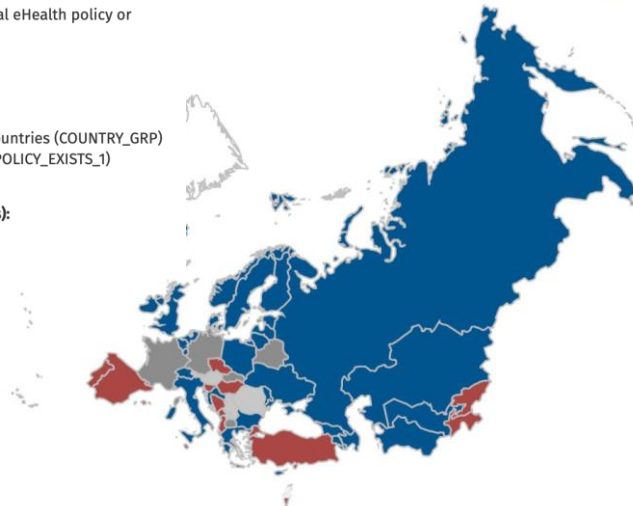
- Country (COUNTRY)
- Supranational group of countries (COUNTRY\_GRP)
- Policy or strategy exists (POLICY\_EXISTS\_1)

**Years data is available:**

**Indicator is part of data set(s):**

eHealth

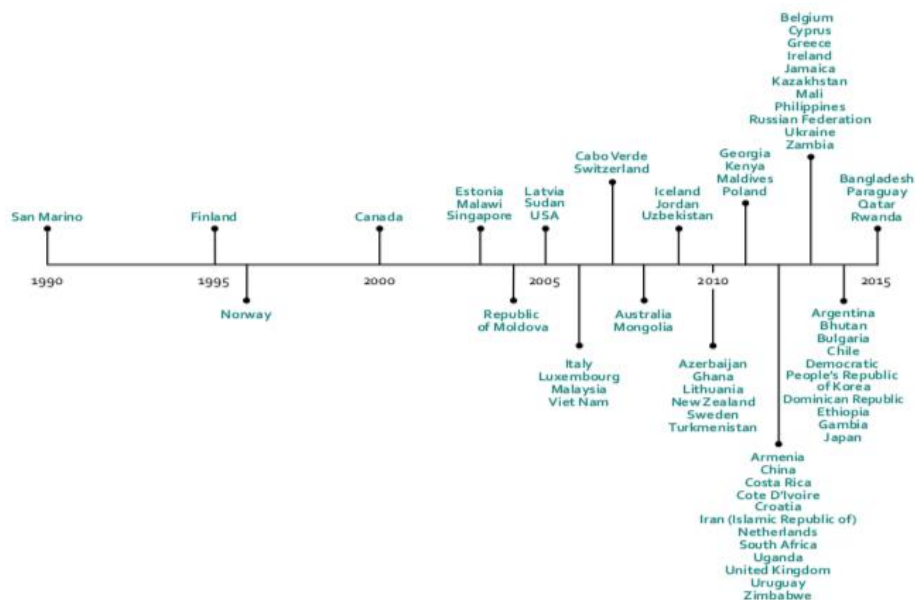
**Last updated:** 02 June 2017



■ Yes ■ No ■ Unknown ■ No response ■ Did not participate in survey

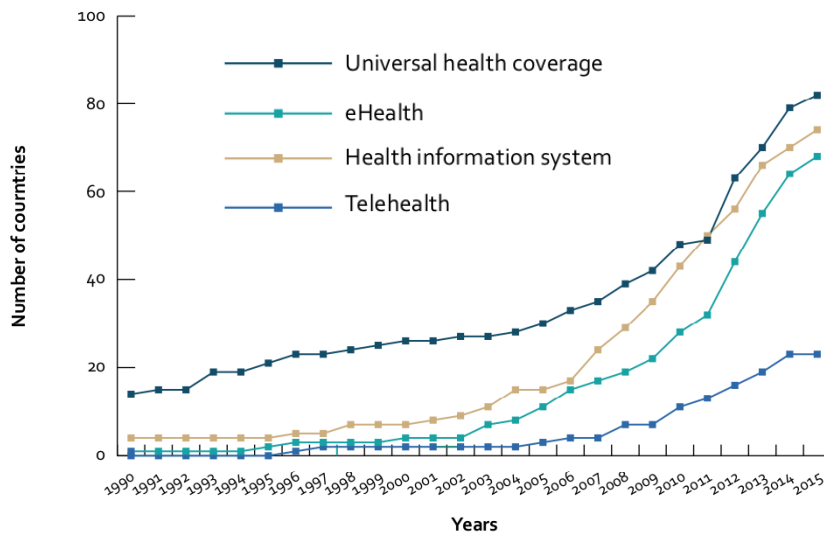
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## Atlas of eHealth country profiles



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## Atlas of eHealth country profiles



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## Context



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## Context



		2016	2017	2018	2019	2020	Total	Average Citations per Year
Use the checkboxes to remove individual items from this Citation Report								
or restrict to items published between 1900 and 2020 Go								
<input type="checkbox"/>	1. The Law of Attrition							
By: Eysenbach, G JOURNAL OF MEDICAL INTERNET RESEARCH Volume: 7 Issue: 1 Article Number: e11 Published: JAN-MAR 2005		6032	8177	10052	8625	0	49985	2499.25
<input type="checkbox"/>	2. The Impact of eHealth on the Quality and Safety of Health Care: A Systematic Overview							
By: Black, Ashly D.; Car, Josip; Pagliari, Claudia; et al. PLOS MEDICINE Volume: 8 Issue: 1 Article Number: e1000387 Published: JAN 2011		106	108	116	85	0	943	62.87
<input type="checkbox"/>	3. Medicine 2.0: Social Networking, Collaboration, Participation, Apomediation, and Openness							
By: Eysenbach, Gunther JOURNAL OF MEDICAL INTERNET RESEARCH Volume: 10 Issue: 3 Article Number: e22 Published: 2008		82	82	64	37	0	574	63.78
<input type="checkbox"/>	4. The Internet of Things for Health Care: A Comprehensive Survey							
By: Islam, S. M. Riazul; Kwak, Daehan; Kabir, Md. Humayun; et al. IEEE ACCESS Volume: 3 Pages: 678-708 Published: 2015		51	42	34	19	0	490	40.83
<input type="checkbox"/>	5. eHealth literacy: Essential skills for consumer health in a networked world							
By: Norman, Cameron D.; Skinner, Harvey A. JOURNAL OF MEDICAL INTERNET RESEARCH Volume: 8 Issue: 2 Article Number: e9 Published: 2006		39	143	172	123	0	483	96.60
		41	80	90	81	0	451	32.21

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JOURNAL OF MEDICAL INTERNET RESEARCH

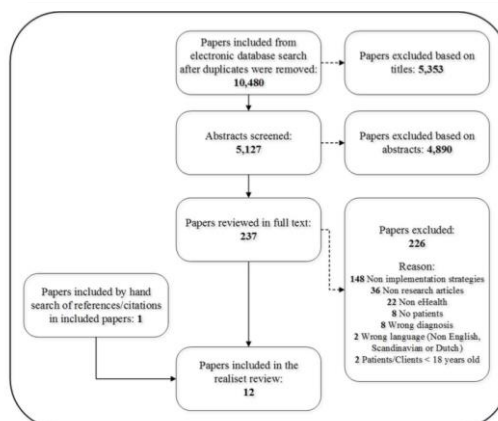
Varsi et al

### Review

## Implementation Strategies to Enhance the Implementation of eHealth Programs for Patients With Chronic Illnesses: Realist Systematic Review

J Med Internet Res. 2019 Sep 27;21(9):e14255.

Cecilie Varsi<sup>1</sup>, PhD; Lise Solberg Nes<sup>1,2,3</sup>, PhD; Olaf Birna Kristjansdottir<sup>1,4</sup>, PhD; Saskia M Kelders<sup>5,6</sup>, PhD; Una Stenberg<sup>7</sup>, PhD; Heidi Andersen Zangi<sup>7,8</sup>, PhD; Elin Børøsund<sup>1</sup>, PhD; Karen Elizabeth Weiss<sup>9</sup>, PhD; Audun Stubhaug<sup>2,10,11</sup>, PhD; Rikke Aune Ashbjørnsen<sup>1,5,12</sup>, MSc; Marianne Westeng<sup>1</sup>, MSc; Marte Ødegaard<sup>1,3</sup>, MSc; Hilde Eide<sup>1,14</sup>, PhD



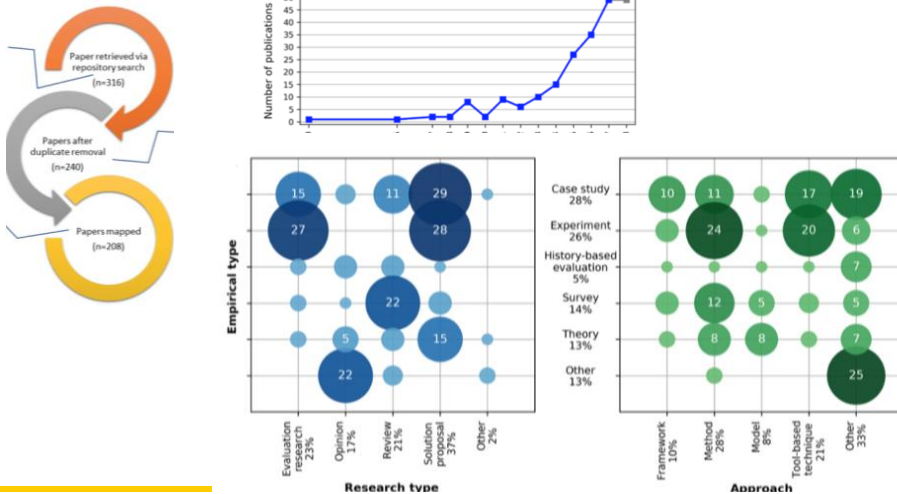
The review points to the lack of eHealth studies that report implementation strategies in a comprehensive way and highlights the need to design robust studies focusing on implementation strategies in the future.

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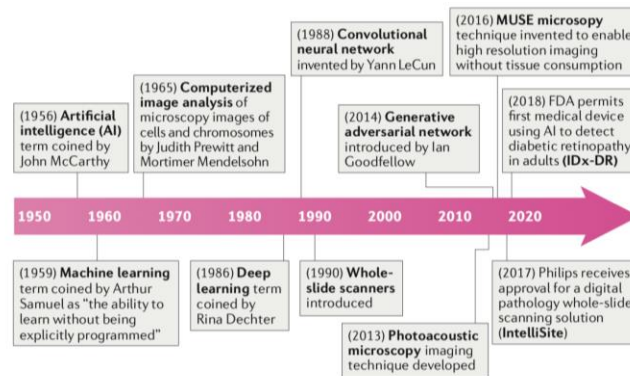
## The Extent and Coverage of Current Knowledge of Connected Health: Systematic Mapping Study

J Med Internet Res. 2019 Sep 25;21(9):e14394.

Maria Karampela<sup>1</sup>, MSc; Minna Isomursu<sup>2</sup>, PhD; Talya Porat<sup>1</sup>, PhD; Christos Maramis<sup>4</sup>, PhD; Nicola Mountford<sup>5</sup>, PhD; Guido Giunti<sup>3</sup>, MD, PhD; Ioanna Chouvarda<sup>4</sup>, PhD; Fedor Lehocki<sup>6</sup>, PhD



## Context



**Fig. 1 | Milestones in computational pathology.** Over the past two decades, technological advances have enabled efficient digitization of whole-slide images, subsequently helping to streamline pathology workflows across pathology labs worldwide. Slide digitization has enabled the creation of large-scale digital-slide libraries, the most popular of which is probably The Cancer Genome Atlas<sup>18</sup>, which has enabled researchers around the world to freely access a richly curated and annotated dataset of pathology images linked with clinical, outcome and genomic information, in turn spurring substantial research activity into artificial intelligence for digital pathology and oncology<sup>189</sup>.

Bera, K., Schalper, K. A., Rimm, D. L., Velcheti, V., & Madabhushi, A. (2019). Artificial intelligence in digital pathology — new tools for diagnosis and precision oncology. Nature Reviews Clinical Oncology. doi:10.1038/s41571-019-0252-y

State of the art in e-health in the partner countries

## OBJECTIVE

1

## Objective

### **The state of the art study aims:**

- To establish a baseline on eHealth
- To identify good practices in each region.
- To promote the Exchange of experiences and sharing practices among the regions.
- To map the innovations in health technology.
- To find new approaches for planning and organizing health services.
- To compile relevant research and reports in the e-Health topic.

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State of the art in e-health in the partner countries

## APPROACH

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### Approach

#### To get the information we will use:

- Survey
- Partners success stories
- Pivotal documents:
  - OMS eHealth survey
  - Health at glance OECD
- International Funding Projects in eHealth
  - H2020, Interreg, COST
  - National calls?
- Relevant publications in the eHealth field
  - WOS, Pubmed
- Regional / National policies


1


## Approach

## Survey:

ITEMAS  
eHospital group

## Results at national Level (at least in Spain)





## Proyectos de telemedicina (Grupo e-Hospital)

El objetivo de la encuesta es tener una aproximación de la importancia que tienen los proyectos de "Telemedicina en el ámbito de la innovación de las UCA's", así como conocer barreras y palancas habituales.

Nombre del centro / nodo ITEMAS


Tu respuesta


Correo electrónico


Tu respuesta


Marcar la opción que mejor se adecua. En la cartera de proyectos de innovación de tu centro ¿Qué porcentaje del total suponen los proyectos de Telemedicina?


- ☐ Menos del 5%
- ☐ Entre el 6 y el 15 %
- ☐ Entre el 16% y el 25%
- ☐ Entre el 26% y el 40%
- ☐ Más del 41%


























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## Approach

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## Survey: eHealth Projects/initiatives in your region

- What percentage of eHealth projects are developed in your region with respect to total of health projects?
  - Less than 5%
  - Between 6 and 15%
  - Between 16% and 25%
  - Between 26% and 40%
  - More than 41%

•

## Approach

### Survey: eHealth Projects/initiatives in your region

- What stakeholder usually proposes and / or leads eHealth projects in your region?
  - Partner companies
  - The Hospital Computing Service
  - Clinical Services
  - Ministry of Health
  - The hospital Director
  - Research/Academic entities (Innovation Support Unit)
  - Other structures

1

## Approach

### Survey: eHealth Projects/initiatives in your region

- What stakeholder act as barrier in eHealth projects in your region?
  - Business
  - The Hospital Computing Service
  - Clinical Services
  - The Ministry of Health
  - The hospital Director
  - Research/Academic entities (Innovation Support Unit)
  - Other structures

1

## Approach

### Survey: eHealth Projects/initiatives in your region

- What is the most common source of financing for eHealth projects in your region?
  - Regional Budget
  - Hospital Budget
  - Public calls
  - Co-development with companies
  - Sponsors
  - Other source of financing

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## Approach

### Survey: eHealth Projects/initiatives in your region

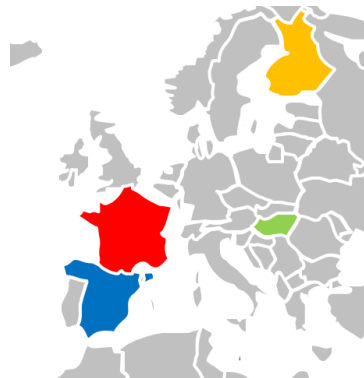
- What is the main barrier to the development of eHealth projects in your region?
  - Lack of funding
  - Little digital culture in your region
  - Key services do not cooperate (ICT services, clinics, etc)
  - Regulatory compliance issues with Data Protection Law
  - Lack of management support
  - The project value proposal was insufficient
  - Difficulties in system integration
  - Other causes

1

## Approach

### Success Stories

- FINLAND  FI
- FRANCE  FR
- MALTA  MT
- HUNGARY  HU
- SPAIN  ES



At least **four** success stories in the field of eHealth in your region, free text in the survey

1

## Approach

### Success Stories

- Compilation of success stories and creation of a “eHealth recipe book”



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## Approach

### Success Stories

*itemas isciiii*



**TECNOLOGÍA DE FABRICACIÓN ADITIVA "IMPRESIÓN 3D"**  
CASO DE ÉXITO CURE CHANCES - INICIATIVA EUROPEA

★ ★ ★ ★ ★ 105 modelos desde 2016  
1 solicitud semanal

15 radiólogos involucrados en el proyecto  
Más de 26 clínicos han realizado al menos una solicitud

11 Servicios clínicos han participado en el proyecto  
Laboratorio de Impresión 3D con tecnologías FDM, SLA y Polyjet

**Ingredientes**

- Cirujanos
- Radiólogos
- Ingenieros Biomédicos
- Técnicos de radiología
- Empresas del sector
- Impresoras 3D domésticas
- Un proceso definido

**El truco del CHEF**

- Incorporar la tecnología requiere de un cambio de procesos y de una reorganización de los recursos.
- Empezar por segmentar hueso (trauma, maxilo), es el proceso más sencillo de imprimir. Poco a poco se irá escalando. Vascular, Cirugía Pediátrica y Cirugía General pueden ser servicios a los que también les puede interesar la tecnología.
- Para desarrollar biomodelos complejos o productos sanitarios, existen diferentes empresas con la certificación de "Fabricante de Producto Sanitario a medida"

#### Elaboración

1. Se crea una plataforma en la intranet del hospital para la solicitud de biomodelos. Los avisos de este peticionario llegan a un equipo multidisciplinar liderado por Radiología y la Unidad de Innovación.
2. Cualquier clínico de la organización puede solicitar un biomodelo a través de esta plataforma explicando el motivo de la solicitud y la referencia del caso.
3. El caso se segmenta a través de los Radiólogos especializados, mediante el software vinculado al equipo TAC o RM.
4. El archivo STL generado se cuelga en la plataforma y esta mallita se limpia a través de software libre en un 2do postproceso de la imagen.
5. Se selecciona la mejor tecnología (FDM, SLA, Polyjet) y se imprime el modelo a través de técnicos o ingenieros.
6. Se realiza un control de calidad de las piezas y un informe final del biomodelo. Se valida el biomodelo con los clínicos y radiólogos.
7. Si el biomodelo va a estar en el campo quirúrgico se envía a esterilización.

#### Example:

- Name of the initiative
- Ingredients
- Elaboration
- Chefs' Advice

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## Approach

### Pivotal docs



### Health at a Glance: Europe 2018

#### STATE OF HEALTH IN THE EU CYCLE

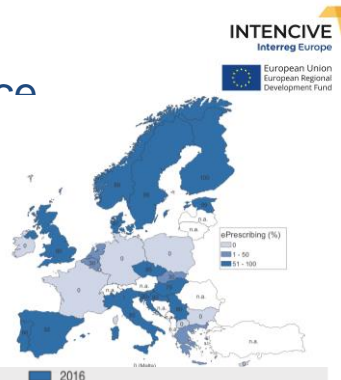
Chapter 8. Resilience: Innovation, efficiency and fiscal sustainability .....	191
Adoption and use of Electronic Medical Records and ePrescribing .....	192
Individuals using the internet to access health services and health information ..	194
Public health laboratory capacity to control infectious diseases threats .....	196
Average length of stay in hospital .....	198
Day surgery .....	200
Capital expenditure in the health sector .....	202
Projections of public expenditure on health and long-term care .....	204

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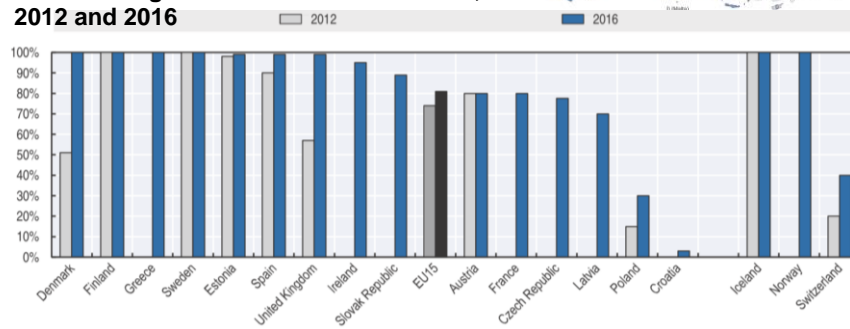
## Approach

### Pivotal docs: health at glance

Percentage of  
ePrescriptions  
in community  
pharmacies,  
2018



Percentage of primary care physician  
offices using electronic medical records,  
2012 and 2016



## Approach

### Pivotal docs: eHealth survey



Global Observatory for eHealth

Launch of Atlas of eHealth country profiles 2015

Global survey

Publications

eHealth policies

Atlas of eHealth  
country profiles  
2015



The third global survey on eHealth conducted by the WHO Global Observatory for eHealth (GOe) has a special focus – the use of eHealth in support of universal health coverage. eHealth plays a vital role in supporting universal health coverage in a variety of ways relating to cost, access and quality of services. This Atlas presents data collected on 125 WHO Member States. The survey was undertaken between April and August 2015 and represents the most current information on the use of eHealth in these countries.

Read more

Alphabetical list of the eHealth country profiles, 2015

<p><b>1. eHealth foundations</b></p> <p>Introduction . . . . . 11</p> <p>Results and analysis . . . . . 12</p> <p>Discussion . . . . . 19</p> <p>References . . . . . 20</p> <p>CASE STUDY - eHealth foundations</p> <p>Electronic immunisation registries, Latin America . . . . . 22</p>	<p><b>3. Telehealth</b></p> <p>Introduction . . . . . 56</p> <p>Results and analysis . . . . . 57</p> <p>Discussion . . . . . 65</p> <p>References . . . . . 68</p> <p>CASE STUDY - telemedicine</p> <p>Pink Vision, Kenya . . . . . 70</p>	<p><b>5. Electronic health records</b></p> <p>Introduction . . . . . 93</p> <p>Results and analysis . . . . . 94</p> <p>Discussion . . . . . 100</p> <p>References . . . . . 101</p> <p>CASE STUDY - EHR</p> <p>My eHealth Record, Northern Territory, Australia . . . . . 105</p>	<p><b>8. Big data</b></p> <p>Introduction . . . . . 143</p> <p>Results and analysis . . . . . 144</p> <p>Discussion . . . . . 147</p> <p>References . . . . . 148</p>	<p><b>7. Social media</b></p> <p>Introduction . . . . . 127</p> <p>Results and analysis . . . . . 128</p> <p>Discussion . . . . . 136</p> <p>References . . . . . 137</p> <p>CASE STUDY - Social media</p> <p>Break Dengue, Brussels, Belgium/global . . . . . 138</p>
<p><b>2. mHealth</b></p> <p>Introduction . . . . . 27</p> <p>Results and analysis . . . . . 28</p> <p>Discussion . . . . . 46</p> <p>References . . . . . 47</p> <p>CASE STUDY - mHealth</p> <p>eSohat . . . . . 48</p>	<p><b>4. eLearning</b></p> <p>Introduction . . . . . 76</p> <p>Results and analysis . . . . . 77</p> <p>Discussion . . . . . 84</p> <p>References . . . . . 86</p> <p>CASE STUDY - eLearning</p> <p>eLearning programme . . . . . 88</p>	<p><b>6. Legal frameworks for eHealth</b></p> <p>Introduction . . . . . 108</p> <p>Results and analysis . . . . . 110</p> <p>Discussion . . . . . 122</p> <p>References . . . . . 124</p>	<p><b>Annex 1. Survey methods</b></p> <p>Survey development and focus . . . . . 150</p> <p>Building support for the survey . . . . . 150</p> <p>Online data collection . . . . . 151</p> <p>Data processing . . . . . 151</p> <p>Response rate overview . . . . . 151</p> <p>Limitations . . . . . 153</p>	

## Atlas of eHealth country profiles



### Spain

Country context*	Population (000s)	46,927	Life expectancy at birth (years)	83
	GNI per capita (PPP Int \$)	31,850	Total health expenditure (% GDP)	8.9
	Physician density (per 10 000 population)	4.95	ICT Development Index rank	27
	Nurse & midwife density (per 10 000 population)	5.67	Mobile-cellular subscriptions (% population)	108.36
	Hospital bed density (per 10 000 population)	32	Internet users (% population)	72

### Finland



Country context*	Population (000s)	5,426	Life expectancy at birth (years)	81
	GNI per capita (PPP Int \$)	38,480	Total health expenditure (% GDP)	9.4
	Physician density (per 10 000 population)	2.91	ICT Development Index rank	5
	Nurse & midwife density (per 10 000 population)	10.86	Mobile-cellular subscriptions (% population)	172.32
	Hospital bed density (per 10 000 population)	62	Internet users (% population)	91

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## Atlas of eHealth country profiles



### Hungary



Country context*	Population (000s)	9,955	Life expectancy at birth (years)	75
	GNI per capita (PPP Int \$)	21,000	Total health expenditure (% GDP)	8
	Physician density (per 10 000 population)	3.08	ICT Development Index rank	42
	Nurse & midwife density (per 10 000 population)	6.48	Mobile-cellular subscriptions (% population)	116.07
	Hospital bed density (per 10 000 population)	71	Internet users (% population)	72

#### 1. eHealth foundations

National policies or strategies			
	Country response	Global 'yes' response <sup>1</sup>	Year adopted
National universal health coverage policy or strategy	Yes	75%	2014
National eHealth policy or strategy	No	58%	N/A
National health information system (HIS) policy or strategy	No	66%	N/A
National telehealth policy or strategy	No	22%	N/A
Funding sources for eHealth			
	Country response	Global 'yes' response <sup>1</sup>	Funding source % <sup>2,3</sup>
Public funding	Yes	77%	>75%
Private or commercial funding	Yes	40%	Zero
Donor/non-public funding	—	63%	Zero
Public-private partnerships	—	42%	Zero
Multilingualism in eHealth			
	Country response	Global 'yes' response <sup>1</sup>	Year adopted
Policy or strategy on multilingualism	No	28%	N/A
Government-supported internet sites in multiple languages	N/A	48%	
eHealth capacity building			
	Country response	Global 'yes' response <sup>1</sup>	Proportion <sup>4</sup>
Health sciences students – Pre-service training in eHealth	Yes	74%	<25%
Health professionals – In-service training in eHealth	—	77%	N/A

#### 2. Legal frameworks for eHealth

Policy as legislation – purpose	Country response	Global 'yes' response <sup>1</sup>
Defines medical jurisdiction, liability or reimbursement of eHealth services such as	—	51.0%

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- The third global survey on eHealth
- Conducted by the WHO Global Observatory for eHealth (GOe)
- 125 WHO Member States
- 64% response rate,



## Approach

### International Funding Projects in eHealth

- Databases:

KEEP.EU → INTERREG PROJECTS

Interreg Europe

Interreg Sudoe

Interreg POCTEP ...

CORDIS → H2020

FP7

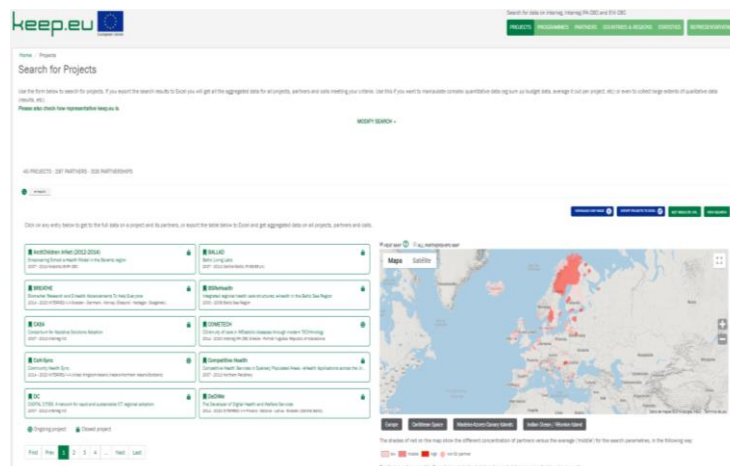
FP6 ....

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## Approach

### International Funding Projects in eHealth

- Search in Keep.eu



1

## Approach

### International Funding Projects in eHealth

45 PROJECTS - 297 PARTNERS - 308 PARTNERSHIPS

[Go to partners map](#)

[DOWNLOAD MAP IMAGE](#) [EXPORT PROJECTS TO EXCEL](#) [GET RESULTS URL](#) [NEW SEARCH](#)

Click on any entry below to get to the full data on a project and its partners, or export the table below to Excel and get aggregated data on all projects, partners and calls.

- ArctiChildren InNet (2012-2014)**  
Empowering School e-Health Model in the Barents region  
2007 - 2013 Arctic ENPI CBC
- BALLAD**  
Baltic Living Labs  
2007 - 2013 Central Baltic (FI-SE-EE-LA)
- BREATHE**  
Biomarker Research and E-health Advancements To Help Everyone  
2014 - 2020 INTERREG V-A Sweden - Denmark - Norway (Öresund - Kattegat - Skagerrak)

- Filter: **eHealth**  
45 projects  
297 partners  
308 partnerships

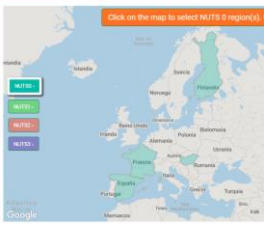
(all Europe, all programmes, ongoing and closed Projects...)

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## Approach

### International Funding Projects in eHealth

**Partners**



[Click on the map to select NUTS 2 region\(s\)](#)

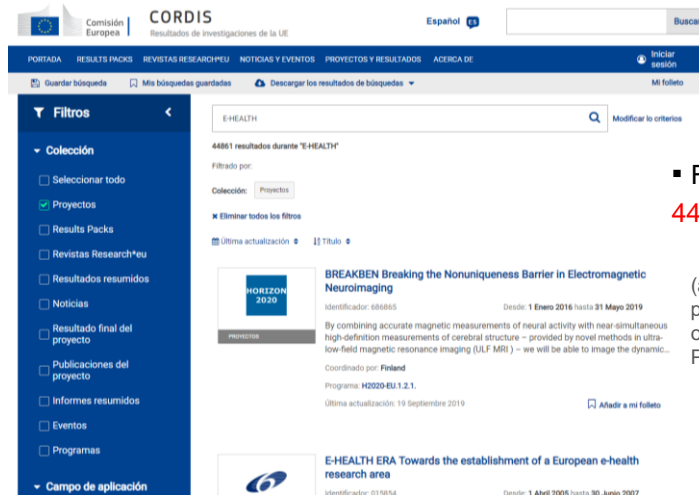
**keep.eu**

15 PROJECTS - 150 PARTNERS - 155 PARTNERSHIPS

[Go to partners map](#)

# Approach

## International Funding Projects in eHealth

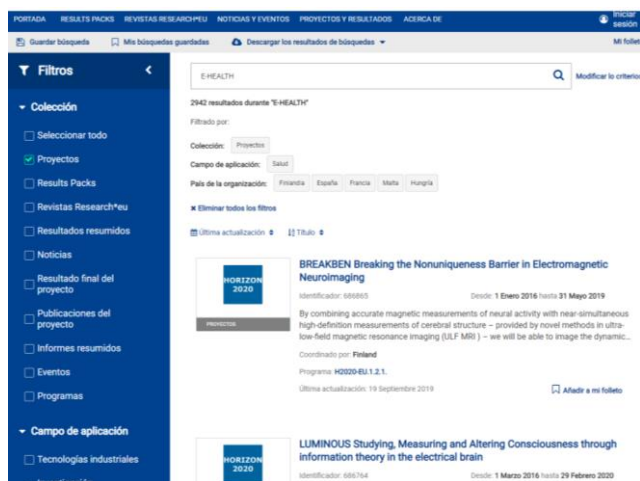


**Filter: eHealth**  
**44,861 projects**

(all Europe, all programmes, ongoing and closed Projects...)

# Approach

## International Funding Projects in eHealth



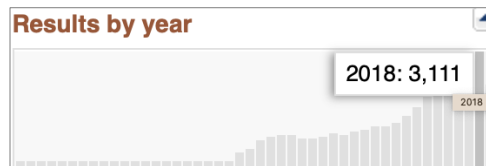
**Filter: eHealth;**  
**partner countries,**  
**Health topic**  
**2,942 projects;**

(we have to select more filters and study them)

FI  
FR  
MT  
HU  
ES

## Approach

### Relevant Publications (“eHealth”)

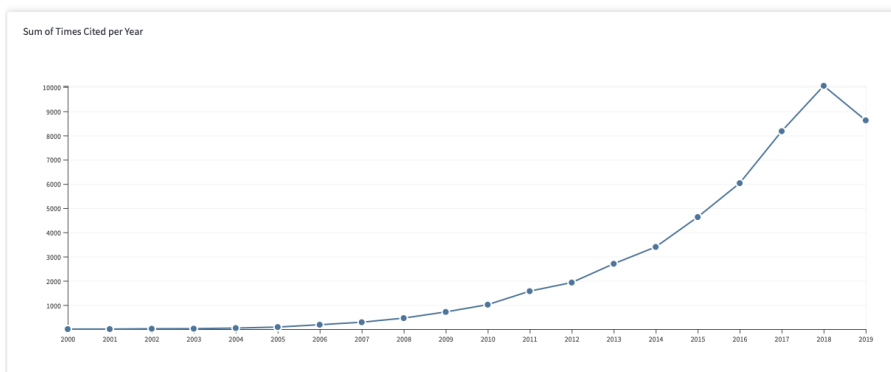
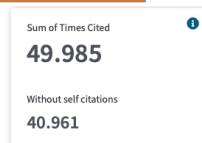
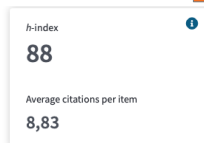
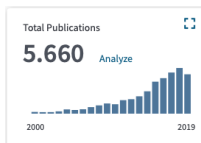


Scopus

7,852 document results

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## Approach

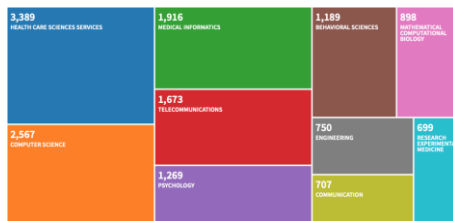


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## Approach



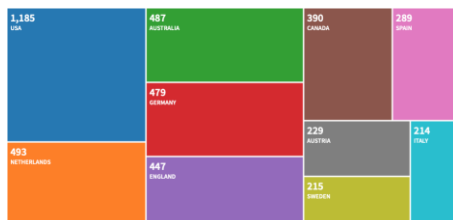
### Research areas



### Institutions



### Countries



### Journals



1

## Approach



	2016	2017	2018	2019	2020	Total	Average Citations per Year
Use the checkboxes to remove individual items from this Citation Report							
or restrict to items published between 1900 and 2020 Go							
<input type="checkbox"/> 1. The Law of Attraction By: Eysenbach, G JOURNAL OF MEDICAL INTERNET RESEARCH Volume: 7 Issue: 1 Article Number: e11 Published: JAN-MAR 2005	6032	8177	10052	8625	0	49985	2499.25
<input type="checkbox"/> 2. The Impact of eHealth on the Quality and Safety of Health Care: A Systematic Overview By: Black, Ashly D; Car, Josip; Pagliari, Claudia; et al. PLOS MEDICINE Volume: 8 Issue: 1 Article Number: e1000387 Published: JAN 2011	106	108	116	85	0	943	62.87
<input type="checkbox"/> 3. Medicine 2.0: Social Networking, Collaboration, Participation, Apomediation, and Openness By: Eysenbach, Gunther JOURNAL OF MEDICAL INTERNET RESEARCH Volume: 10 Issue: 3 Article Number: e22 Published: 2008	82	82	64	37	0	574	63.78
<input type="checkbox"/> 4. The Internet of Things for Health Care: A Comprehensive Survey By: Islam, S. M. Riazul; Kwak, Daehun; Kabir, Md. Humayun; et al. IEEE ACCESS Volume: 3 Pages: 678-708 Published: 2015	51	42	34	19	0	490	40.83
<input type="checkbox"/> 5. eHealth literacy: Essential skills for consumer health in a networked world By: Norman, Cameron D.; Skinner, Harvey A. JOURNAL OF MEDICAL INTERNET RESEARCH Volume: 8 Issue: 2 Article Number: e9 Published: 2006	39	143	172	123	0	483	96.60
	41	80	90	81	0	451	32.21

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## The Impact of eHealth on the Quality and Safety of Health Care: A Systematic Overview

Ashly D. Black<sup>1</sup>, Josip Car<sup>1</sup>, Claudia Pagliari<sup>2</sup>, Chantelle Anandan<sup>2</sup>, Kathrin Cresswell<sup>2</sup>, Tomislav Bokun<sup>1</sup>, Brian McKinstry<sup>2</sup>, Rob Procter<sup>3</sup>, Azeem Majeed<sup>4</sup>, Aziz Sheikh<sup>2\*</sup> [PLOS Med.](#) 2011 Jan 18;8(1):e1000387.

**Table 8.** Evidence of benefits associated with ePrescribing.

Benefits							
Reference ID	Surrogate Outcomes	Guideline Adherence	Safer Prescribing	Communication	Patient Outcomes	Resource/ Cost Savings	Time Savings
Ammenwerth 2008	Pot. ADEs +/+ +	N/A	MEs ++	N/A	ADEs +	N/A	N/A
Bryan 2008	+	+	N/A	N/A	+/-	+	N/A
Chatellier 1998	+/++	N/A	+/+	N/A	Death +/- Haemorrhage +/- Thromboembolic events +/-	N/A	N/A
Clamp 2005	++	+	MEs ++	+	ADEs +	+	+
Delpierre 2004	+/-	+	MEs+	N/A	+/-	N/A	N/A
Durieux 2008	+/++	+	+/++	N/A	Death +/-	+/++	N/A
Eslami 2007	+	+/+ +	+/-	N/A	+/-	+	+
Eslami 2008	+	+/+ +	+	+	+/-	+	+
Eslami 2009	+	+	N/A	N/A	+/-	N/A	N/A
Fitzmaurice 1998	+	N/A	+	N/A	+	N/A	N/A
Garg 2005	+/++	+	+/-	N/A	+/-	+/-	N/A
Hider 2002	+/++	+/+ +	+	+/+ +	+	+	N/A
Jamal 2009	+	+/++	+	N/A	+/-	+	N/A
Mitchell 2001	+	N/A	N/A	N/A	+/-	+	+

## Approach



### Regional / National Policy

We are going to analyze the eHealth policy for each region.

Most of them are described in the INTENCIVE Proposal, if we need more information, we will contact you.

## Approach

### Policies addressed and territorial context

Country	Partner	Policy Addressed
 HU	Pannon Business Network Association	Economic Development and Innovation Operational Programme (2014HU16M0OP001)
 MT	Ministry of Gozo	A Vision for an Eco-Island
 FI	Regional Council of Ostrobothnia	Regional Strategy of South Ostrobothnia, Objective 3: Healthy people and communities
 FR	ID2Santé	Regional ERDF Operational Programme (Bretagne) Priority 1: enhance the development of the digital strategy
 ES	IDIVAL	Cantabrian Health Plan 2014-2019

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State of the art in e-health in the partner countries

## WORK DISTRIBUTION

1



## Work Distribution

### Deliverable 1 : State of the art report

PP6 – IDIVAL: will lead this Task, we will be in charge of the compilation of information.

- Each of you should fill the survey that we have prepared (you could suggest more questions to add)
- IDIVAL (with external support) will prepare a report about the international Projects, publications, research about eHealth in the project partners' regions.
- IDIVAL will compile the **success histories** that you have included in the survey



1

State of the art in e-health in the partner countries

## OUTPUTS and RESULTS

1

## Outputs

### Main output:

Deliverable 1: State of the art report

### As a results:

- Identification of main stakeholders in each region in the eHealth field.
- Implementation status of the eHealth in each region
- Number of international/collaborative projects in eHealth in each region
- Identification of success stories
- Exchange of good practices
- Study / Analysis of regional policies in eHealth
- Dissemination / Publication of the report

1

## Results

**The State of the Art report will be the basis to develop the Action Plans.**

It is expected to get as a result:

- At least 20 good practices identified
- 1 Publication "state of the art" e-report
- 5 targeted policy instruments identified
- Establish the basis to improve the capacities of the staff members in the eHealth field

1



**INTENCIVE**  
Interreg Europe



European Union  
European Regional  
Development Fund

Thank you!

Questions welcome

   *Project smedia*

### APPENDIX 3. Survey.

*This survey has three different parts, one referred to the publications, the second to operational environment and the last referred to good practices cases.*

#### PART A. PUBLICATIONS IN INTENCIVE COUNTRIES.

Please review the list in the state-of-the-art report and answer the following questions related with your region/country:

- 2- Do you consider that the documents listed in the state-of-the-art report for each country (top cited documents) are representative of the main e-documents of **INTENCIVE** countries? If not, please explain why and offer an alternative way for identify them.
- 3- Of the top **INTENCIVE** documents (overall *Intencive* (Appendix 1) and country specific) please indicate what are the most valuable in your opinion.
- 4- Which other e-Health Intencive countries/regions related documents do you think are relevant?

PART B. DESCRIPTION OF THE OPERATIONAL ENVIRONMENT. Please describe the operational environment in your region. Shortly basic things about the region and relation with eHealth. What kind of organizations you have related to eHealth? Is something missing (ie. companies or univeristies)? What are the main challenges or barriers related to eHealth?

**PART C. GOOD PRACTICES CASES.** Please describe briefly 10 cases of e-health good practices in your region/country.

**1. Case 1**

- Title
- Objective
- Activities
- Results
- Budget
- Stakeholders involved in the case

**2. Case 2**

- Title
- Objective
- Activities
- Results
- Budget
- Stakeholders involved in the case

.....

**10. Case 10**

- Title
- Objective
- Activities
- Results
- Budget
- Stakeholders involved in the case

In case that you need more information about the documents and publications, in the link below you can find a list of the top cited documents accordingly Web of Science search engine with authors affiliated to all Intencive countries, other list refers only to one specific country, etc.

<https://www.dropbox.com/sh/vfkyy9ibtpd6lq8/AAC1Xov2NJCOB6K65zqGK71Ma?dl=0>.