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Strategic Intelligence Monitor on Personal Health Systems, Phase 2

Interim Report on RMT for Disease Management: Country Studies Summary

Author: Elena Villalba

Editors: Fabienne Abadie, Maria Lluch,
Francisco Lupiañez, Ioannis Maghiros,
Elena Villalba, Bernarda Zamora

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Joint
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Centre

European Commission
Joint Research Centre
Institute for Prospective Technological Studies

Contact information

Address: Edificio Expo. c/ Inca Garcilaso, 3. E-41092 Seville (Spain)

E-mail: jrc-ipts-secretariat@ec.europa.eu

Tel.: +34 954488318

Fax: +34 954488300

<http://ipts.jrc.ec.europa.eu>

<http://www.jrc.ec.europa.eu>

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1 SIMPHS2 background and rationale for this report

The Strategic Intelligence Monitor on Personal Health Systems (SIMPHS) project is a multi-annual research project carried out in cooperation with DG INFSO/H1 aiming to facilitate an understanding of the market and innovation dynamics of PHS, both from a supply and demand side perspective.

Concretely, the second phase of the project (SIMPHS2) has covered Integrated Personal Health and care Services (IPHS) both from a supply and demand side perspective. To achieve its objectives, SIMPHS2 proposed four project steps:

1. Methodological set up.
2. Data gathering, including the fact finding on RMT, Telecare, and the focus on Disease Management. Data collected are reported within this deliverable 3.1 "Interim report on RMT for disease management - Country Studies".
3. Strategic intelligence. The qualitative comparison of the common elements from the studied countries is included in deliverable D4.1 "Evidence consolidation - Report on best practices and key drivers of success".
4. Interaction and communication with stakeholders.

The country studies were carried out as part of the second step: data gathering. As units of analysis the regional and local level health and social care authorities were primarily analysed, before being integrated and supplemented by a focus on health and social care producing units (hospitals, primary care, social care units), on health and social care professionals (doctors, nurses, professional carers), on companies providing ICT based solutions and services and last but not least, the final users (patients, formal and informal carers, and citizens).

SIMPHS2 has carried out in depth studies in eight selected EU countries. Deliverable 3.1 "Interim report on RMT for disease management - Country Studies Summary" summarises firstly the methods used and the rationale for selection of the countries for deeper analysis; and secondly, it highlights the main findings of the studies. The annexes include the eight reports in alphabetic order: Denmark, Estonia, France, Germany, Italy, Spain, The Netherlands and United Kingdom.

In the third step, deliverable 4.1 "Evidence consolidation - Report on best practices and key drivers of success" presents the consolidation of the country studies carried out, providing a comparison across countries on ICT developments with a specific focus on IPHS deployment and approaches to integrated care. Conclusions are drawn around integrated care, key barriers, drivers and lessons learnt as well as transferability of models of integrated care delivery.

2 SIMPHS2 country studies

2.1 Research phases and methods

As a starting point, a clustering exercise was performed to select the countries for field work. Deliverable D1.1 “Methodological Set up Report” describes the process in detail. Secondary data was collected to understand the Health and Social care system in each country and later analyze the deployment of IPHS in each of them.

The EU27 Member States were categorized based on their eHealth readiness and healthcare market mechanisms. Out of this distribution four clusters emerged and some countries were selected for in depth study.

For the selected countries, secondary and primary data were collected through desk research and field work. The research approach was regional, even local, since the organisation of the health care and social care in EU countries follows this schema. This allows SIMPHS2 to extract valuable information from the cases and pilots running in the regions.

To collect primary data in the field work interviews were carried out with policy makers and government officers, HTA agencies, healthcare managers, health and social care professionals, and some patients.

2.2 Clustering exercise

As stated in SIMPHS Deliverable D1.1 “Methodological Set up Report”, the EU27 countries were analysed and categorized taking into account the following characteristics:

- Socio-demographic statistics (Total population, Age structure, Socio-economics, Education)
- Prevalence statistics
- Healthcare organisation, costs, financing, incentives and DMP
- Social care organisation
- ICT context – investment, applications, penetration, data exchange

Later, they were distributed based on their eHealth readiness (related to eHealth activities) and healthcare system market mechanisms.

Within the eHealth readiness axis, three set of indicators were used¹: (a) ICT spending per capita, (b) hospital eHealth deployment: and (c) seeking health information on the internet. An average for each EU Member State was computed. When looking into eHealth readiness the countries with higher scores are: Finland, Denmark, Sweden, The Netherlands and United Kingdom.

The axis for Healthcare system market mechanisms aims to capture the differences amongst different Member States depending on the policies and arrangements implemented. It is derived depending on whether there is purchaser-provider split and whether this split results in one single purchaser, multiple purchasers and the market

¹ Based on data from 2008, for further information see Deliverable 1.1 Methodological Set up Report, concretely Section 4, Country selection: description and justification.

mechanisms amongst purchasers. On the other hand, payment mechanisms have also been included within this axis, as these may incentivise to a higher or lesser extent competition amongst providers.

Regarding the market mechanisms, EU Member States display a wide range of options. Within one of the extremes, we find the Netherlands following a Statutory Health Insurance (SHI) scheme with multiple insurers operating on quasi-market conditions combined with a private system of healthcare delivery. There are other countries also on SHI schemes such as Germany, France, Austria or Belgium. However, some features of these healthcare systems show more government intervention when compared to the Netherlands.

At the other end, countries like Sweden, Finland and Denmark present hardly any purchaser provider split. In other Member States where healthcare is the competence of the regions like Italy and Spain, the purchaser provider-split varies per the region but private insurance is very weak. Countries like the UK or Ireland also follow a National Health Service (NHS) model; however, often market mechanisms are implemented through a payment system (e.g. DRGs) or GPs operating in independent practices contracting with the NHS as opposed to state employed GPs.

Following the clustering objective, a matrix was developed with the two axes identified as "eHealth readiness" and "healthcare system market mechanisms" as described above. EU countries were subsequently located in the matrix according to their characteristics on each of these two dimensions as illustrated in Figure 1.

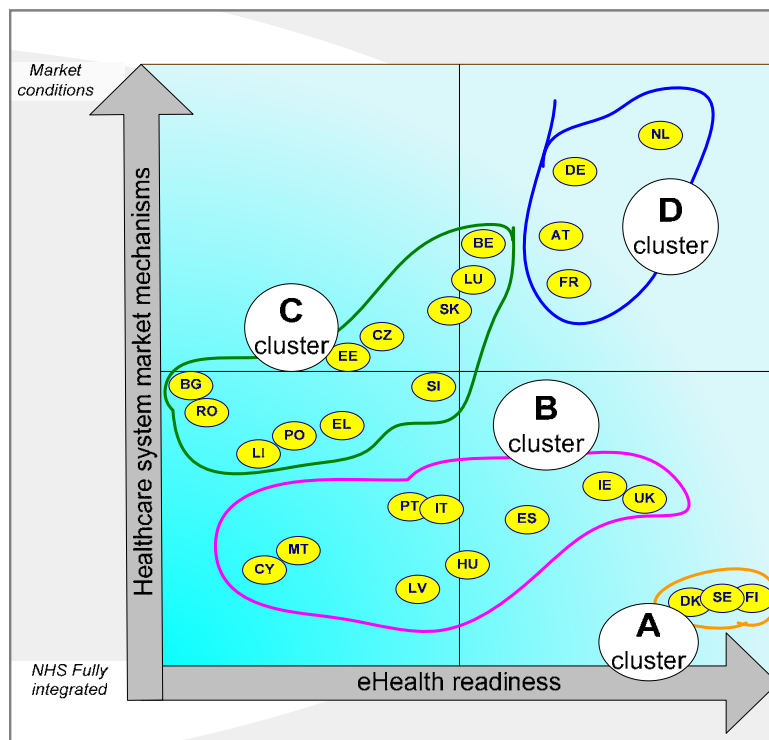


Figure 1 Clustering exercise: Member States distribution based on eHealth readiness and healthcare system market mechanisms [Author's elaboration].

From this distribution four different clusters emerged which have been labelled alphabetically.

Cluster A is characterised by a very high eHealth readiness and low market mechanisms, and represents the Nordic model of healthcare system. Since the variation amongst

them is low, only one of them was selected for deeper analysis: Denmark. The rationale for selecting Denmark was twofold: first there was evidence of IPHS projects in Denmark and secondly, it is claimed to be the gold standard regarding eHealth deployment.

Cluster B is a disperse group in terms of eHealth readiness but all countries share low market mechanisms. Zooming into these experiences could provide further insights for drivers and barriers to ICT for health in general and to IPHS in particular. The following countries were selected to be zoomed in: the UK, Spain and Italy. The UK was selected for its purchaser-provider split. Italy and Spain instead, were selected precisely for their variety amongst region; these countries often represent a microcosm of the EU 27 Member States.

Within Cluster C many countries (such as Bulgaria, the Czech Republic, Greece or Romania) were excluded from deeper analysis due to informal payments (see country fact sheets delivered in D1.1). Estonia was selected for its high IT investments in Health while countries like Belgium or Luxemburg which did not seem to provide additional insights from the already selected countries were not retained for deeper analysis. Belgium and Luxemburg could have been included in cluster D rather than cluster C but since they were not selected for deeper analysis this does not affect the results.

Cluster D includes those countries with high relative eHealth readiness and healthcare systems with stronger market mechanisms. Within this cluster, the Netherlands, Germany and France were selected to be further studied. The Netherlands was selected as the only quasi-market healthcare system in the EU; Germany was selected as a representative of the implementation of the traditional Bismarck model as well as for being a lead country when it comes to chronic disease management programmes. Finally France represents an example of a mixed system combining elements from the Beveridge and Bismarck model with a strong focus on chronic disease management programmes as well.

The location of the countries in the matrix might have changed slightly with the introduction of the GDP in the weighing of eHealth readiness as suggested in the SIMPHS2 Validation Workshop, but for the remit of our objectives looking for IPHS deployment, the selection of countries would have remained the same.

To summarize, the following countries were selected for further study:

- A. Denmark (DK) – Cluster A
- B. United Kingdom (UK), Spain (ES) and Italy (IT) – Cluster B
- C. Estonia (EE) – Cluster C
- D. Germany (DE), France (FR) and The Netherlands (NL) – Cluster D

This selection provides a wide scope of experiences in countries with varying degrees of government intervention, different market mechanisms and different models of care, for instance in some of them the GP has a strong gate-keeping role (UK, Spain, Italy, Denmark, the Netherlands, Estonia) whilst in others this role is weaker (France or Germany).

Furthermore, the rationale for selection of only some countries per cluster lies in the intention to illustrate practices and examples of the deployment of IPHS which can be extrapolated to countries with similar characteristics, while enabling to obtain granular

data which would not have been feasible with a wider range of countries. However, this extrapolation has several limitations, especially in clusters with high dispersion such as cluster C and B since the socioeconomics characteristics and Healthcare and social care organization are not uniform. Still, we consider that the practices described can raise awareness and findings useful to the other countries when developing their own integrated care services since there are common trends. Thus, the results provide a good picture of opportunities and challenges in different settings as well lessons to be learnt and useful tools for policy-makers.

Deliverable 1.1 “Methodological Set-up Report”, (Section 4) provides further details on the rationale for the distribution in the matrix and the subsequent country selection exercise.

2.3 Field work in the eight selected countries

The work carried out for the selected countries was performed either by the Information Society unit at IPTS (Spain and the UK), through tenders for subcontracting the study or a mix of both (France).

In all cases, SIMPHS2 relied on **local agents** in order to gather their unique knowledge, expertise and insights. All studies addressed: (a) demographics and chronic diseases prevalence; (b) description of the healthcare and social care systems; (c) a strong focus on IPHS deployment; and (d) Innovation, Governance and Impact discussion.

The eight country studies portray an overview of the health and social care systems including socio-economic data, statistics on healthcare, health and social care organisation and their approach to chronic diseases and integrated care. An overview of the eHealth developments is also included. In-depth studies in each setting focus on IPHS applications and cases, level of deployment and analysis of drivers and barriers to scale-up these initiatives.

Data found in these studies build evidence through: (a) interviews with individuals working in regional healthcare authorities and in local producing units (hospitals, primary care units); (b) grey literature (internal reports) and data not publicly available and obtained from authorities and producing units; and (c) primary data selected from the internal databases of the healthcare producing units selected for in-depth analysis.

From a clinical perspective, three chronic diseases were the foci of study: chronic obstructive pulmonary disease (COPD), cardiovascular diseases (CVD) and diabetes, due to the impact of these three conditions on healthcare systems. Thus, approaches to integrated care around these three conditions have been the object of each country study.

As a result, the field work in the selected countries included desk-research through a **regional approach** for secondary and primary data collection; and interviews for primary data collection. The interviews were carried out with policy makers, government officers, HTA agencies, healthcare managers, health and social care professionals and in some cases also with patients.

The rationale for exploring the countries from a regional approach is twofold. Firstly, in some Member States, such as Spain and Italy, health and social care is organised regionally and even locally (especially social care) and there are huge differences between regions. The National level often just generates high level legislation and performs monitoring, but the deployment is done by regional or local authorities.

Secondly, going regional would allow us to identify best practices and extrapolate the experiences throughout other regions across Europe which share demography and health and social care characteristics.

Furthermore, a few projects were studied in each country, in total 31 involving almost 20,000 patients and citizens as shown in Table 1.

Table 1: Summary of pilots and projects studied per country

Cluster	Country	# Telecare / Telehealth projects	#Users projects
A	DK	5	1,255
B	UK	4	6,148
	ES	6	5,054
	IT	4	4,716
C	EE	3	108
D	DE	2	335
	FR	3	596
	NL	4	1,357
TOTAL		31	19,569

Many of them are only pilots and lack a wide deployment, but we found very promising examples in most countries.

The following sections present the main findings in each cluster.

2.3.1 Cluster A: Denmark

Denmark is characterised by a very high eHealth readiness and low market mechanisms and belongs to the Nordic model of healthcare systems. Furthermore, Denmark is considered the eHealth deployment gold standard.

Denmark has been a pioneer in the use of electronic communications within each of and across the various tiers of care. MedCom (the Danish Health Data Network) has been established as a joint project organisation to provide common standards for communication and infrastructure in and across the primary and secondary care sector. Also, more recent initiatives such as sundhed.dk have given way to a common infrastructure and have served to construct health related content in such a way that both health professionals and citizens have a common access to data. Furthermore, the continuity of care programmes from SST (Danish National Board of Health) has provided a common way of delivering care for chronically ill patients across traditional sector boundaries. Policy-wise, Danish IPHS and RMT are somewhat supported by basic legislation already in place and strategic support from all main players, as well as the new government platform. This, together with funding support programmes like the PWT Foundation and incentives like the DRG reimbursement rates for telemedicine helps to bring down barriers and speed up the development of IPHS and RMT in Denmark.

The main technological barriers are interoperability and standardisation, as stated for instance in the Briefcase project description, whereby all data and information gathered is not integrated into the Electronic Patient Record (EPR) of the hospital, but registered in a stand alone application. As each region has chosen its own EPR (almost only one per region), data sharing between the five regions’ EPRs is especially difficult.

Besides, incentives are still a barrier when investments have to be made in one sector while the benefits are found in others.

With regards to TeleHealth projects the report zooms into 5 examples: 3 of them are deployed only in Southern Denmark and the fourth also in the Zealand region. The Telekat project takes place in North Denmark. The Patient Briefcase, which permits Telehealth for better breathing deserves to be highlighted. At the time of writing this report the solution had been tested with approximately 800 patients, out of which 133 patients were involved in the clinical study and MAST² evaluation. Another example targeting stroke patients is the ePatch project, which aims to monitor heart arrhythmias of patients at home to early detect atrial fibrillation and thus allow prevention of stroke. The piloting phase will start in 2012. The other projects are The Anti Coagulant, the Diabetic Foot Ulcer and the Telekat projects. The latter offers RMT for COPD patients stage 3 and 4, to prevent readmissions of citizens suffering from COPD by encouraging help to self-help in rehabilitation in the patient's own home. In total, 132 COPD patients took part in the piloting.

Regarding Telecare, in Denmark all people over 65 years old are entitled to have an alarm system, so the penetration of telecare is really high.

Table 2 summarizes projects described within the Denmark country study.

Table 2: Projects overview in Cluster A

Cluster A - Denmark				
Region	Name of the Project	Target	Market	# users
Southern Denmark	The Patient Briefcase	COPD Patients	TH	800
Southern Denmark	ePatch	Stroke Patients	TH	-
Southern Denmark	The Anti Coagulant	AC patients	TH	300
Zealand and Southern Denmark	Diabetic Foot Ulcer Project	Diabetic Patients	TH	23
North Denmark	Telekat	COPD Patients	TH	132

2.3.2 Cluster B: United Kingdom, Spain and Italy

United Kingdom

As stated earlier, countries in this cluster share low market mechanisms.

In UK, the interest in telehealth has been highly influenced by the positive experience of the US Veterans Health Administration (VHA) with these applications. In both England and Scotland, the case for assistive technologies has been growing as a result, with a number of successful pilots and trials across the two home countries, mainly primary care driven with the exception of a hospital experience. Telecare is well established in

² MAST is Model for ASsessment of Telemedicine, from Methotelemed project based on EUnetHTA Core model.

both settings whilst telehealth is not yet widespread. In Scotland for instance 180,000 patients benefitted from telecare services as of March 2010.

Both in England and Scotland significant funding has been made available to pilot and develop telehealth and telecare applications and the evolution of this funding allocation is also worth noting. The significant level of funding and the fact that such funding was not limited to initiating activities but significant funding was made available for further deployment has been crucial to allow for mainstreaming (e.g. the new funding made available under the DALLAS programme focus on assisted living technologies and services).

Regarding innovations in place, in both England and Scotland, two types of innovation have been identified: technology innovation itself and the innovation related to the reorganisation of services, the latter being the most significant. The recent transfer of adult care services to the healthcare system is one of the examples that illustrate the way policies also accompany service reorganisation.

Nevertheless, incentives and reimbursement remain an issue for widespread adoption in particular because of the different incentives in different tiers of care.

It is worthy to highlight the **Whole System Demonstrator (WSD) in England** with more than 5,700 patients (including dependent people, diabetes patients, HF and COPD patients). Early indications show that if used correctly telehealth can deliver a 15% reduction in A&E visits, a 20% reduction in emergency admissions, a 14% reduction in elective admissions, a 14% reduction in bed days and an 8% reduction in tariff costs. More strikingly they also demonstrate a 45% reduction in mortality rates. However, these outstanding results were obtained assuming an already redesigned system and there will therefore be issues concerning the generalisability of the results, because the sites which are part of the Whole System Demonstrator pilots have been specifically chosen for their innovations in these areas of care.

Spain

With regard to Spain, which is characterised by a high digital divide, we find huge differences amongst regions and there is no interoperability across any of them. The study focuses on three regions: Andalusia, Basque Country and Catalonia, all moving towards testing and deployment at scale and involving different tiers of care. In both Catalonia and the Basque Country the corresponding HTA agencies are involved in IPHS deployment. From a governance point of view, Spain approved a royal decree in 2011 imposing regional interoperability, EHR, ePrescription and cooperation between health and social care. However, IPHS implementation is still undertaken at regional level. It is also worthy to highlight the strong government push in the Basque Country where there is a political action to promote chronic disease management including RMT. Regarding first generation Telecare in Spain the penetration is high with almost 5% of 65+ people using such services and a strongly growing trend every year.

With regard to the specific projects, for instance NEXES at Hospital Clinic in Catalonia involves 3,600 patients suffering from COPD, CHF and diabetes. In Hospital Donostia, Basque Country, 1,338 patients in geriatric centres and primary care participated in a RCT on telemonitoring of chronic patients care in geriatric centres to tackle dependent patients living in this type of centres.

Italy

Italy has similar characteristics as Spain regarding differences among regions and tiers of care. With regards to the IPHS related settings in place, we would like to underline the case of Telemaco, in Lombardy, with 1,000 chronic patients in a telemonitoring and teleconsultation system; and the eCare/CUP 2000, telemonitoring and social care in Emilia Romagna, targeting 3,000 chronic patients. eCare/CUP 2000 presents a truly integration of different domains such as healthcare and social services whereby each user-report is multidisciplinary and created and used by physicians, nurses and social workers. It is worthy to state that within eCare/CUP 2000 19% of the target population has been enrolled. Moreover, eCare/CUP 2000 stakeholders are considering the incorporation of IPHS in the services.

Both in Spain and Italy given the diversity of approaches towards integrated care identified across these regions there is room for know-how exchange amongst them.

Table 3 summarises projects studied in the UK, Spain and Italy and which are further described within each country study.

Table 3 Projects overview in Cluster B

Cluster B- United Kingdom				
Region	Name of the Project	Target	Market	# users
England	WSD	Telecare: Dependent people. Telehealth included diabetes, CVD and/ or COPD patients	TC/TH	5,721
Scotland/Lothian	Telescot	COPD Patients	TH	256
Scotland, Bute island- Highlands	Community Telehealth pods in Oban and Isle of Bute	COPD Patients	TH	80
England – North Yorkshire / York	TeleHealth COPD	COPD Patients	TH	91
Cluster B- Spain				
Region	Name of the Project	Target	Market	# users
Andalusia	PITes EPOC	COPD Patients	TH	56
Basque Country	TELBIL	HF and Chronic lung disease patients	TH	60
Basque Country	Telemonitoring of chronic patients care in geriatric centres	Patients living in geriatric centres	TH	1,338
Catalonia	NEXES	COPD, CHF and type II diabetes patients	TH	3,600
Cluster B – Italy				
Region	Name of the Project	Target	Market	# users
Piedmont	MyDoctor@home	Elderly	TH/TC	416
Piedmont	VCO	Diabetic, COPD, cancer or chronic heart failure patients	TH	300
Lombardy	Telemaco	Chronic patients (inc. CHF, diabetic, TBI, Stroke)	TH	1,000
Emilia Romagna	eCare/CUP 2000	Chronic patients	TH/TC	3,000

2.3.3 Cluster C: Estonia

Estonia is a society in transition and slowly but steadily catching up with the old Europe in terms of living standards. This transition is creating a setting in which there appears to be an important place for medical service innovation such as the introduction of wide spread Telecare applications. There is a high use of Internet, but still there are evidences of a digital gap.

Regarding Healthcare, a nation wide system including EHR has been implemented in Estonia. However the level of integration between health and social care systems seems to be very low.

There are some Telecare projects with few users involved, funding coming from European Programmes (e.g. VIRTU and DREAMING projects). With regard to Telehealth, it is worthy to mention ELIKO, a technology venture and project development involving an incubator and the East-Tallinn Central Hospital (ETCH) aiming to create an economically viable telemedicine service that can be employed in practice for the provision of health services. Still, there are still few pilots and activities being undertaken. Up until today it has been cheaper to employ manual labour in health and social care than to implement technology, in spite of the high emigration of GPs and specialists.

Table 4 summarizes projects studied in Estonia which are further described within the country study.

Table 4: Projects overview in Cluster C

Cluster C – Estonia				
Region	Name of the Project	Target	Market	# users
Islands Saaremaa, Hiiumaa, Muhumaa, Ruhnu	VIRTU	Elderly	TC	8
East-Tallinn Central Hospital (ETCH)	DREAMING	Elderly	TC	60
Tallin (ELIKO & ETCH)	ELIKO Project	Elderly	TH	40

2.3.4 Cluster D: Germany, France and the Netherlands

This cluster includes those countries with a high relative eHealth readiness and healthcare systems with stronger market mechanisms.

Germany

In Germany, following a Bismarck model, the majority of the population (90%) is covered by mandatory statutory health insurance. Patients have a relatively high degree of choice in terms of where to receive medical care. The majority of doctors providing ambulatory care are self-employed, while hospital doctors are employees of the hospital. Doctors and insurance providers are organised through self-governance and play a powerful role in the system. Nevertheless, there is no integration among healthcare and social care.

Although there are currently over 240 IPHS services in Germany, most initiatives have not progressed beyond pilot stage because long-term funding was not available (e.g. lack of reimbursement by insurance providers), the evidence base did not necessarily exist and the structures of the system did not allow accommodating such new ways of working. An exception to this is the successful telehealth service offering by the company Vitaphone, targeting heart failure patients through agreements with insurers covering a total of 40,000 members. In addition the large scale study Partnership for the Heart and Telemedical Interventional Monitoring in Heart Failure (TIM-HF) has been carried out in Germany addressing 710 heart failure patients. The study concluded that telehealth improved quality of life, but it did not reduce mortality, for reasons related to patient inclusion criteria and the already very good health outcomes for such patients with traditional care. In spite of these two examples, a comprehensive national e-health strategy seems to be needed to support the implementation of IPHS and other e-health services. Moreover, there is a need for a strong policy push for ICT, incentives and to promote the cooperation amongst tiers of care.

France

The French Healthcare system is a mix of Beveridge and Bismarck models and it involves numerous actors and sources of finance. The “Hospital, Patients, Health and Territories” (HPST) law of 21 July 2009 has made the regional/local level a key element of health policies to support the objective of integrating prevention, primary and secondary care as well as social care so as to ensure continuity of care for patients. The law implies a global reform which aims to support institutions and infrastructures in adapting to the new needs of the population. This reform combined with the making available of funding through dedicated programmes promoting health ICT including large scale IPHS deployment illustrates a strong government push for integrated care through technology.

With regard to the projects, two large scale initiatives should be mentioned:

- SOPHIA, an initiative from the statutory health insurance fund which targets 400,000 diabetes patients and is likely to include further conditions in the future.
- Vigisanté which targets 13,500 patients in the North Calais region, with the goal to reduce complications associated with hypertension and the resulting work absence. It was initiated by three complementary insurance funds with the support of the statutory health insurance.

Data on outcomes of these initiatives were not available at the time of writing, which is why the French country study focused on telecare initiatives. In this context we would like to underline the Y-DOM nationwide industry-led initiative, which aims to provide professionals with smart phones to better monitor, manage and coordinate service staff attending elderly at home. The project targets 6,500 Telecare elderly users from 60 care organisations.

While projects presented in the French country study focus on telecare and social link, a number of large scale RMT/telehealth initiatives should come out of recent funding allocations through national programmes. However the results will only be available in a year or so from now.

The Netherlands

The Netherlands is characterised by a strong consumer drive and patient empowerment promoting self-management trend and ageing Dutch citizens show an increasing desire

to live independently. Healthcare provision happens in a quasi market situation: multiple insurers who purchase integrated care from healthcare providers negotiating services on the basis of volume, quality and prices. This is quasi opposite to the situation in other countries like Spain.

Although there is a high investment from the Dutch government to finance pilot projects in chronic care there seems to be a lack of costs/benefits assessment which does not allow these initiatives to evolve from mere projects. Therefore a stronger policy drive is needed to make them sustainable in the long term and to make integration possible, as healthcare and social care today are not integrated.

Table 5 gives an overview of the projects studied in Germany, France and The Netherlands and which are further discussed within each country study.

Table 5: Projects overview in Cluster D

Cluster D – Germany				
Region	Name of the Project	Target	Market	# users
Baden-Wuerttemberg	Heitel case study	CVD Patients	TH	300
Hessen	WohnSelbst case study	Elderly: Obesity, at risk of stroke, diabetes, high blood pressure, CHF	TC	35
Cluster D – France				
Region	Name of the Project	Target	Market	# users
Limousin	ESOPPE	Elderly	TC/TH	196
Champagne-Ardenne	DOMOCARE	Elderly	TC	400
Nationwide	Y-DOM	Home service employees	TC	Potential 6,500
Cluster D – The Netherlands				
Region	Name of the Project	Target	Market	# users
Twente	COPDdotCOM	COPD Patients	TH	32
Limburg	TEHAF study Health Buddy	CHF Patients	TH	382
Groningen	In Touch Cardio Consult	CHF Patients	TH	105
Groningen	KOALA	COPD / CHF Patients	TH	838

As described above there are many differences among regions in Europe and the regional approach and the collaboration of local agents have allowed us to obtain a big picture of what is happening in Europe and of the main drivers and barriers.

Regarding drivers, we have seen that in most countries the government plays a crucial role, since without a policy push most initiatives stopped after a piloting phase while successful IPHS deployment always happens in places where there has been a strong government push.

With regard to barriers, lack of evidence is still one of the main factors which slow down the adoption of IPHS while some technological barriers such as the lack interoperability, especially from a semantic point of view also impede IPHS uptake.

2.3.5 Example of potential market: Telecare case in the studied countries

We have found several signs of market developments and pilots in the country studies for telecare which reveal that the market potential tends to be underestimated.

As an example, the following table forecasts the potential market in terms of users in 8 EU countries, considering that a total of 35% of the 90% of population over 65 years could benefit from Telecare services.³

Table 6: Example of Telecare in the 8 studied countries

Data type	UK	ES	FR	NL	DE	IT	DK	EE
Total population ⁴	62,026,962	45,989,016	64,716,213	16,574,989	81,802,257	60,340,328	5,534,738	1,340,127
% 65+ population	16.5	16.8	16.6	15.3	20.7	20.2	16.3	17.1
65+ population	10,234,449	7,726,155	10,742,891	2,535,973	16,933,067	12,188,746	902,162	229,,162
# Users Telecare 2010	1,750,000	622,126	513,158	7,000*	<i>n.a.</i>	3,868*	1,255*	58*
% 65+ Users Telecare 2010	17,099	8,052	4,777	0,276	<i>n.a.</i>	0,032	0,139	0,025
% Growth rate (yearly)	<i>n.a.</i>	20,72	10	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>
Remaining Market potential # users ⁵	1,473,851	1,811,613	2,870,853	791,832	5,333,916	3,835,587	282,926	72,128

* Partial data, based on piloting.

³ As stated in the UK report, page 24.

⁴ Million people, Eurostat 2010.

⁵ With the same assumption, in EU27 globally, the market potential for Telecare reaches 30 Million people.

3 Conclusions

From the cases we studied we can extract a promising trend of increasing awareness and introduction of IPHS, and we found evidence of deployment of Telecare, Telehealth and even IPHS cases. Still more emphasis and push from the government is needed in most cases, although the level of integration and deployment vary amongst EU countries.

More concretely, The Netherlands and Germany (countries from cluster D) show clear signs of market failure, which calls for government intervention. In Estonia (cluster C) higher emphasis on integrated care and funding would be required even if infrastructure is in place. Italy, Spain and the UK (cluster B) have adopted middle out approaches (as opposed to top-down or bottom-up) and they often need additional governance steering. Denmark, representing cluster A, presents higher demand/patient side factors and higher eHealth investments than cluster B and successful IPHS deployment is rooted in the good cooperation between various tiers of care. In conclusion, with the exception of Denmark, all countries still show little cooperation and integration of social and healthcare and need further government intervention.

Generally, looking at policy and decision making, to ensure a sustainable growth of IPHS, (regional) health authorities in their role as payers and healthcare decision makers need to show greater commitment through adequate regulations and, most importantly, by setting incentives.

Moreover the regional approach has also allowed us to obtain data revealing the IPHS market potential and the main barriers faced by IPHS in the EU. Without such an approach we would not have been able to uncover the potential at regional and local level. Furthermore, through the contact to local stakeholders we have gained a realistic view and insight of what still needs to be done.

As presented in the Telecare market extrapolation in Table 6: Example of Telecare in the 8 studied countries, potential is high but the market is still at an embrionic stage. To change this, the political push is one of the main drivers emerging from the country studies while barriers like interoperability, standardisation, lack of incentives and lack of evidence require further attention.

To conclude, regarding the drivers, we have seen that in most countries the government has a crucial role, since without the policy push most initiatives came to nothing after a piloting phase. With regards to the barriers, they is still a lack of evidence which slows down the adoption of IPHS. The main technological barrier is the interoperability and standardization, as stated for instance in the Briefcase project in Denmark, all data and information gathered in not integrated into the EHR of the hospital, but this is a stand alone application. Until we achieve this interoperability, the full deployment of IPHS is will hardly become a reality.

This deliverable D3.1 encompasses the eight country studies which have been analysed in terms of **Innovation, Governance and Impact**. As this analysis is discussed and presented in detail in deliverable D4.1 Evidence consolidation - Report on best practices and key drivers of success, it has been excluded from the scope of this document

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Abstract

The SIMPHS 2 project has carried out in-depth studies in eight EU countries. Deliverable 3.1 'Interim Report on RMT for Disease Management – Country Studies Summary' summarises the methods used and the rationale for selection of the countries for deeper analysis. It also highlights the main findings of the studies. The annexes include the eight reports in alphabetical order: Denmark, Estonia, France, Germany, Italy, Spain, The Netherlands and the United Kingdom.

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