



# Benchmarking ICT use among General Practitioners in Europe 2007

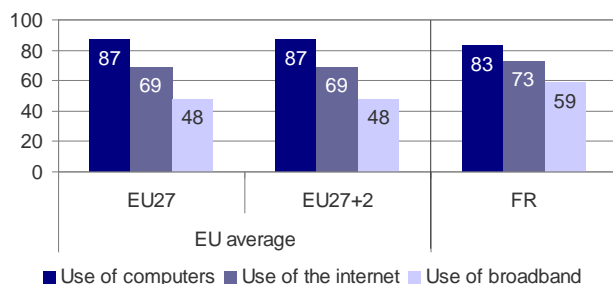
## Country Profile: France

### Key findings: eHealth among GPs in France<sup>1</sup>

France is among the average eHealth performers in the EU27. This concerns both the availability of ICT infrastructure (computer, Internet) and the use of ICT for different eHealth-related purposes.

In terms of infrastructure, 83% of the French GP practices use a computer. 73% of practices dispose of an Internet connection. In France, broadband connections are not yet universal; they are however already available in nearly 60% of GP practices.

#### ICT Infrastructure in French GP practices



**Base:** All GPs. **Indicators:** R4, C1, C2 (cf. annex for more information), % values. **Source:** empirica, Pilot on eHealth Indicators, 2007.

When it comes to the use of eHealth solutions, France shows results that are more or less in line with EU27 averages. This holds true for example for the use of computers in consultation with the patients which is taken advantage of by 72% of French GP practices as compared to an EU27 average of 66%. With regard to local the storage of electronic medical patient data France scores slightly above the EU27 average as well. Especially remarkable is the high share of stored radiological data which in France is stored two times the average

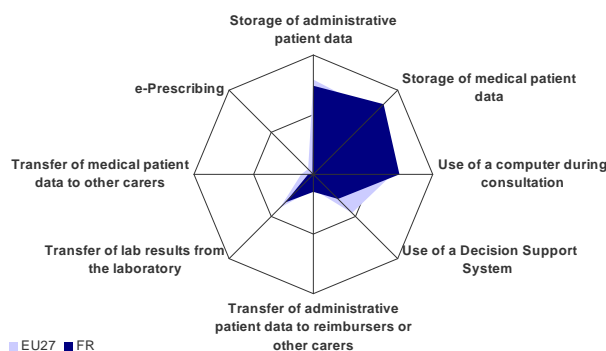
(65% versus 34%). Decision Support Systems are used to a slightly lesser extent than in other countries of the EU.

The use of electronic networks for the transmission of medical patient data is not yet well established in France. Only 5% of the GP practices participating in the survey reported having exchanged medical data with other care providers via some sort of network, 33% having received analytic lab results this way. The shares might increase in the upcoming years due to an Internet based electronic health record (DMP) already under way.

ePrescribing has not really arrived on the agenda of European GPs it is practiced by only 2% of French GP practices and 6% on average in the EU27. The exchange of administrative data with reimbursers on the contrary is well developed in France: 26% of GP practices report the use (as compared to 15% on average in the EU27).

Until now the activities carried out by the French government have been fairly successful in the introduction of eHealth solutions with regard to GP practices. The current infrastructure presents a good basis for further developments. The slightly sceptical attitude of GPs with regard to ICT might be attenuated and overcome by the mainstreaming of eHealth solutions which will take place if current government plans are to be realised.

#### eHealth Use by GPs in France



**Indicators:** Compound indicators of eHealth use (cf. annex for more information), % values. **Source:** empirica, Pilot on eHealth Indicators, 2007.

Current eHealth-related activities under the wider national health system reform strategy include the introduction of smart cards, a national health portal and several application development projects. Since 2004 and the emergence of the

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Healthcare Insurance Act, there is a workgroup dealing with the planning and implementation of Electronic Health Records and — since 2007 — also with an ePrescribing scheme.

## ICT Infrastructure in GP Practices

An appropriate ICT infrastructure in the GP practice lays the ground for different eHealth use cases (such as storage of patient data, its exchange etc.). It is therefore the baseline from which a European GP can start his or her professional activities in the eHealth domain.

ICT infrastructure as understood here entails

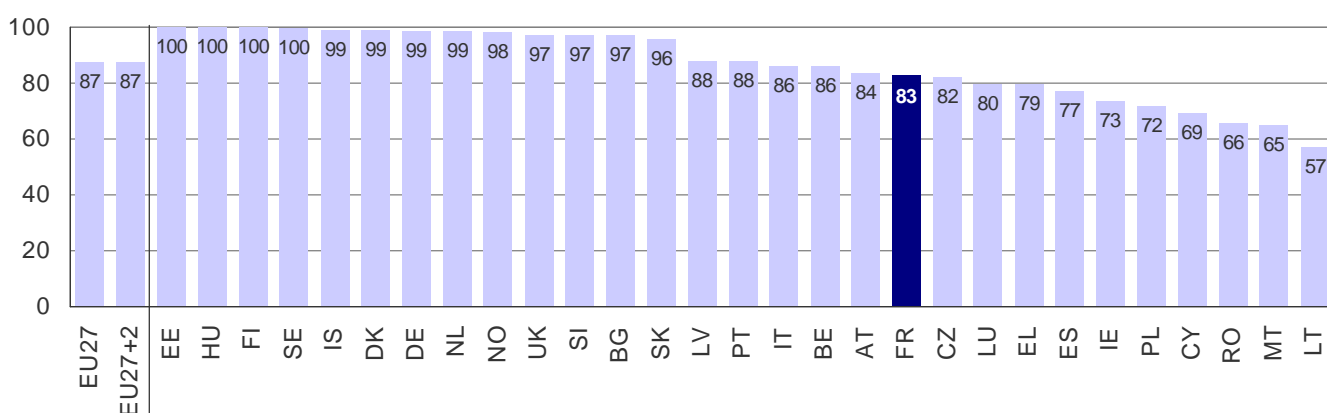
- the availability of one or more computers in the practice;
- a connection with the Internet; and
- the availability of a broadband connection.

## Use of computers

With regard to the use of computers in GP practices, France is holding a mid-field position as 83% of GP practices are equipped with one or more PCs. This result puts France on a par with 10 other EU countries where computer availability rates of 75%-90% are reached. This adds to another large group of countries, including for example Germany, where computer availability in GP practices is nearly universal. All in all 24 countries show a penetration rate of more than 75%, a fact that They are becoming more and more an essential and unquestioned part of practice fixtures.

In France most GP practices fulfil the infrastructural prerequisite for the successful implementation of eHealth applications.

### Use of Computers in GP Practices in France



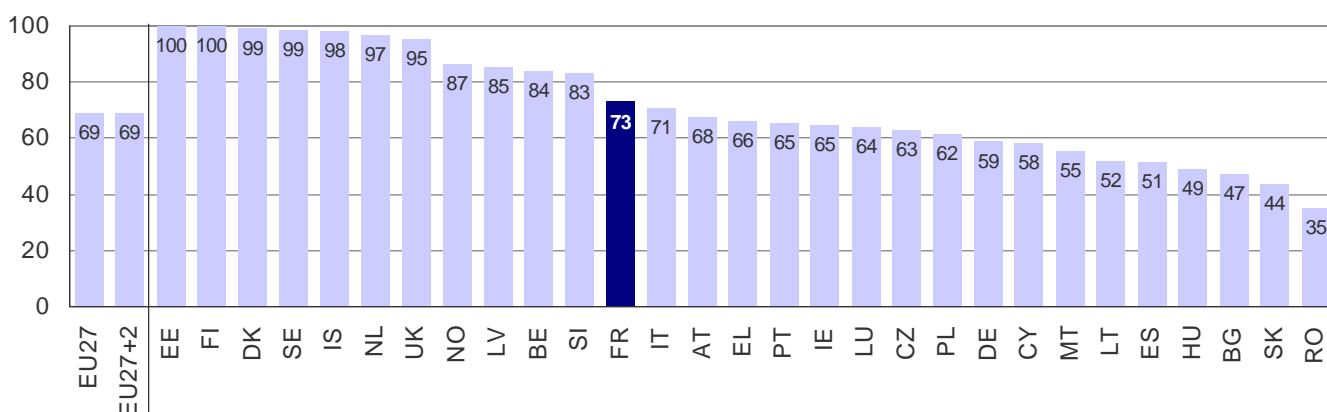
**Base:** All GPs. **Indicator:** R4 (cf. annex for more information), % values. **Source:** empirica, Pilot on eHealth Indicators, 2007.

## Use of the Internet and broadband

A connection to the Internet or any other dedicated network is a prerequisite for all those eHealth applications that entail data transmissions and information retrieval, France again attains only a mid-field position. 73% of French GP practices are connected to the Internet, a rate only slightly above the EU27 average of 69%. When it comes to Internet connections, large differences between Member States persist. France can be regarded as leading a rather large group of countries with less than 75% practices having Internet access.

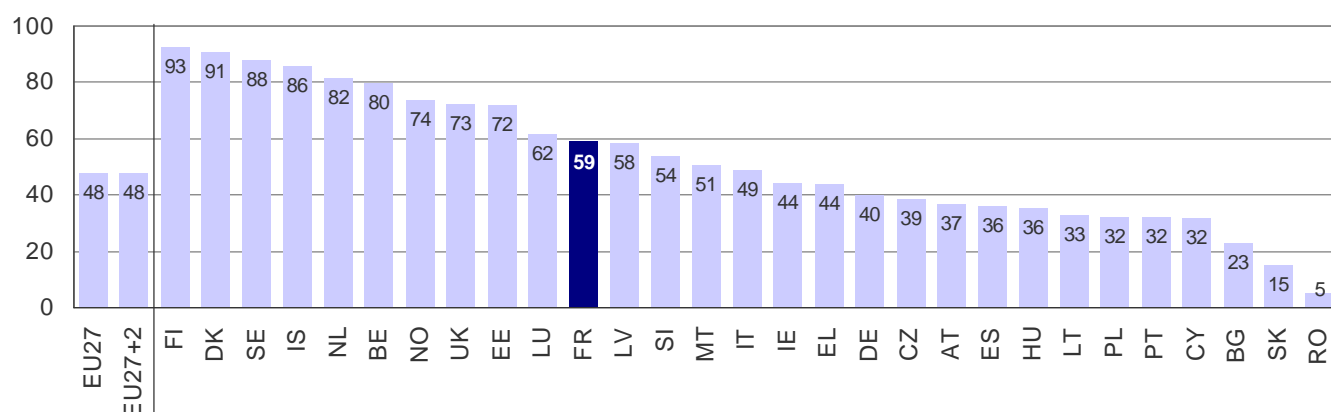
59% of the French GP practices dispose of a broadband connection. France thus positions itself slightly above the EU average of 48%. It is again part of a solid middle group where availability rates vary from 50%-60% of all GP practices. The differences regarding bandwidth remain high across the EU27 Member States and there are still several countries where less than 50% of GP practices have broadband connections.

### Use of the Internet in GP Practices in France



**Base:** All GPs. **Indicator:** C1 (cf. annex for more information), % values. **Source:** empirica, Pilot on eHealth Indicators, 2007.

## French GP Practices Using a Broadband Connection



**Base:** All GPs. **Indicator:** C2 (cf. annex for more information), % values. **Source:** empirica, Pilot on eHealth Indicators, 2007.

## Use of eHealth Applications

With about 87% of European GP practices having a computer and about 69% being connected to the Internet, the question as to if and how this ICT infrastructure is used. The following sections deal with the use of ICT for different purposes in a GP practice's day-to-day business.

### Electronic patient data storage

The storage of electronic medical patient data is comparatively common in France. 74% of the French GP practices store at least one type of individual medical patient data. This places France close to the average European storage rates. It is to be noted that the storage rates for the different data types vary substantially.

In France, the use pattern for the different data types corresponds more or less to the pattern found in the Eu as a whole. The data types stored most often include basic medical parameters (93%), symptoms/ reasons for encounters (92%) and medications (91%).

In comparison to the other EU Member States, France holds all in all a solid mid-field position. It is only with regard to the storage of radiological data that French GP practices score well above average. Radiological data storage is practiced in France two times the EU27 average (65% versus 34%).

## Electronic Patient Data Storage in France:

### Storage of Different Types of Individual Patient Data by GPs storing electronic medical patient data

	EU27	EU27+2	BE	BG	CZ	DK	DE	EE	EL	ES	FR	IE	IT	CY	LV	LT	LU	HU	MT	NL	AT	PL	PT	RO	SI	SK	FI	SE	UK	IS	NO
Diagnoses	90	91	93	97	89	93	99	94	74	89	89	79	85	93	58	65	88	99	80	96	88	73	77	69	89	94	81	97	94	100	100
Medications	90	90	93	93	88	99	93	86	71	94	91	95	95	90	50	8	95	99	80	97	84	55	85	36	43	85	96	95	98	100	99
Basic medical parameters	83	83	91	80	82	96	80	58	65	88	93	85	85	86	42	14	90	96	73	94	80	35	63	49	31	71	90	82	98	90	84
Lab results	79	80	96	83	58	99	78	58	64	81	77	82	75	76	42	17	52	91	66	95	79	53	59	63	20	26	98	97	96	93	98
Symptoms/reasons for encounters	77	77	89	94	70	97	67	59	68	82	92	80	64	86	42	28	88	96	70	96	82	46	73	32	33	60	96	95	92	98	95
Medical history	75	75	89	93	74	97	52	55	73	86	89	84	70	83	50	13	90	93	75	95	69	46	63	34	18	48	98	90	95	100	97
Examinations and results	75	75	87	86	62	95	56	51	64	81	81	68	82	67	42	20	60	93	66	95	76	55	67	58	15	35	98	76	88	92	98
Vital signs measurements	74	74	88	93	67	92	59	51	62	80	88	73	69	88	42	12	76	93	64	92	63	34	70	52	15	51	93	73	92	79	85
Treatment outcomes	65	66	81	78	68	96	52	46	62	76	66	53	58	71	50	26	62	92	58	94	77	49	52	25	14	47	88	78	77	76	91
Radiological images	34	35	53	50	20	98	15	47	42	55	65	23	5	29	42	2	43	70	34	43	49	40	29	12	8	10	95	34	30	87	54

**Base:** GPs storing electronic medical patient data. **Indicator:** A2 (cf. annex for more information), % values. **Source:** empirica, Pilot on eHealth Indicators, 2007.

### Electronic exchange of patient data via the Internet or other dedicated networks

33% of French GPs use network connections for the reception of analytical results from laboratories. Only 5% of GPs

however use networks in order to exchange data with other care providers. These results situate France in a group of countries where use rates do not equal the EU27 averages. While on average 10% of all European GP practices exchange medical patient data with other carer providers, already 40% of

European GP practices use the Internet or some other sort of dedicated network for the reception of analytical results from laboratories.

Telemonitoring has not yet arrived on the scene, neither in France, nor in the EU as a whole. In France less than 1% of the practices use it. The highest share is realised in Sweden, where however still only 9% of the GP practices report making use of telemonitoring. The only other countries with a mentionable use rate of telemonitoring are the Netherlands and Iceland, scoring 3% each.

A similar pattern can be discovered with regard to the exchange of medical patient data across borders. Only 2% of the French GP practices participate in cross-border data exchanges. In this case the Netherlands show the highest usage level with only 5% of practices taking part in cross-border transmissions of medical data. France, Cyprus, Malta, Den-

mark and Greece come in second with scores between 2% and 3%.

The low level of trans-border data sharing may be explained by the fact that the health care jurisdiction is explicitly under the jurisdiction of the individual Member States. Due to the differing health care systems in EU Member States, it is unsurprising that, with only very few exceptions, planned treatment is provided principally in the country of residence.

In France it can be expected that the exchange of medical patient data on a national scale will see a certain raise during the upcoming years as the development of a networked electronic health record (Dossier Médical Personnel – DMP) is under way. Provided for by the Law in August 2004, the system has been successfully piloted in 2006.

### Electronic Exchange of Different Types of Medical Patient Data in France

	EU27	EU27+2	BE	BG	CZ	DK	DE	EE	EL	ES	FR	IE	IT	CY	LV	LT	LU	HU	MT	NL	AT	PL	PT	RO	SI	SK	FI	SE	UK	IS	NO	
Medical data with carers	10	11	13	3	6	74	4	1	4	13	5	2	7	3	0	3	0	2	7	26	12	2	8	2	0	1	55	13	26	17	35	
Analytic results from labs	40	40	73	5	25	96	63	39	3	30	33	40	8	10	1	8	27	12	11	84	37	10	1	4	10	5	90	82	85	52	88	
Telemonitoring	1	1	1	1	0	0	1	0	1	1	1	1	0	0	1	0	0	0	0	3	1	0	1	0	0	0	1	9	2	3	0	
Medical data across borders	1	1	1	1	1	2	0	0	2	1	2	0	0	3	0	0	0	0	3	5	1	0	0	0	0	0	0	0	1	0	0	0

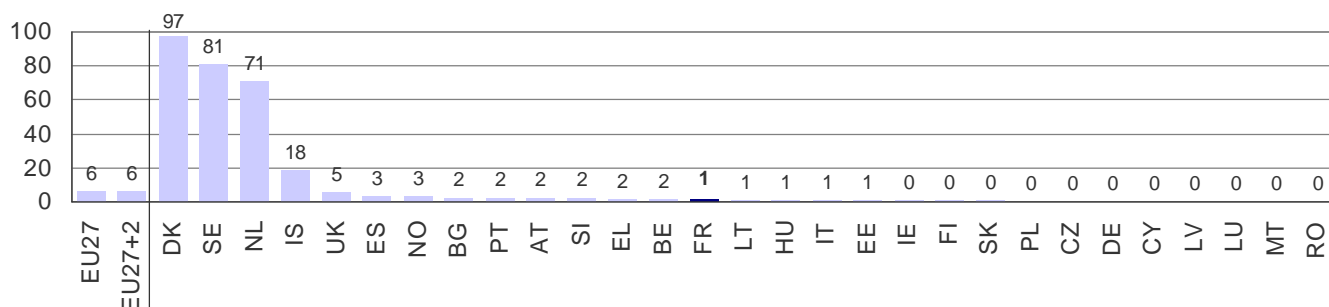
Base: All GPs. Indicator: D1 (cf. annex for more information), % values. Source: empirica, Pilot on eHealth Indicators, 2007.

### ePrescribing

The only three EU Member States where ePrescribing is a reality are Denmark, Sweden and the Netherlands. Abstraction made of this frontrunner group, only Iceland as non-EU mem-

ber states shows an adoption level that rise above 5%. In France virtually no GP practice makes use of ePrescribing.

### Use of ePrescribing by GPs in France



Base: All GPs. Indicator: D1 (cf. annex for more information), % values. Source: empirica, Pilot on eHealth Indicators, 2007.

### Coded data entry

France and Hungary are the EU member state where the use of coded data for the storage of electronic medical patient data is the least prevalent. In both countries only 6% of GP practices use coded data. In contrast, two-thirds of French GP practices store data in uncoded form only. One fifth of the practices use both coded and uncoded data. For the latter, a clear estimation of the coded/uncoded share is not possible.

Coded data entry in this context refers to the use of coding systems such as the ICD (the WHO's International Classification of Diseases) that allows to store a disease or diagnoses as a code rather than as a textual description. Only in a handful of countries the share of practices using solely coded data is above one third. Rather, most practices use a combination of coded and uncoded data.

## Use of data coding for the storage of electronic medical patient information by French GPs

	EU27	EU27+2	BE	BG	CZ	DK	DE	EE	EL	ES	FR	IE	IT	CY	LV	LT	LU	HU	MT	NL	AT	PL	PT	RO	SI	SK	FI	SE	UK	IS	NO
Coded data only	21	21	29	22	6	19	19	35	20	35	6	10	22	10	25	68	2	6	14	37	11	30	18	24	25	36	2	10	24	41	14
Un-coded data only	30	30	36	27	56	31	33	5	58	26	66	50	26	64	25	8	60	5	39	13	55	25	23	26	34	24	26	29	5	5	18
Both coded and un-coded data	45	46	33	50	33	49	48	59	16	36	19	34	50	14	50	13	24	88	25	49	31	19	49	43	33	36	72	54	70	52	64

**Base:** GPs storing patient data. **Indicator:** A4 (cf. annex for more information), % values. **Source:** empirica, Pilot on eHealth Indicators, 2007.

## Exchange of administrative patient data

Data transfer via networks concerns not only medical data, but can also be used for administrative purposes, i.e. for data exchanges between the GP practice and reimbursers or other care providers.

With regard to the exchange of data with reimbursers on the contrary, France is fairly well positioned: 26% of GP practices resort to this form of information exchange, as compared to 15% on average in the EU27. Only Denmark, the Netherlands and the United Kingdom show higher usage rates reaching 43% and more. It is to be assumed that the actual number of GP practices resorting to electronic data transfer to reimbursers in France is even somewhat higher. 60% of all registered GPs are connected to the Sesam-Vitale health card system.

Of those 85% (that is 50% of all GPs in France) are reported using teletransmission mechanism for the transfer of reimbursements claims to the insurance funds. The deviation between the two results may be due to the practitioners not realising that they are connected to a network when they or their staff use the vitale card.

However, only 4% of French GP practices report that they exchange administrative data with other carers, as compared to a EU27 average of 10%. This result puts France on a par with countries like Greece, Ireland, Germany, Italy, Cyprus and Slovenia.

When it comes to the exchange of administrative patient data in the EU27 Member States, huge variations come into view. As regards the exchange of administrative data with other care providers, shares differ between 0% (Latvia and Lithuania) and 74% (Denmark). Rates for the exchange of administrative data with reimbursers also differ widely: from 0% (Latvia and Lithuania) to 48% (Denmark).

## Exchange of Administrative Patient Data in France

	EU27	EU27+2	BE	BG	CZ	DK	DE	EE	EL	ES	FR	IE	IT	CY	LV	LT	LU	HU	MT	NL	AT	PL	PT	RO	SI	SK	FI	SE	UK	IS	NO
Admin data with other carers	10	10	13	6	6	74	3	1	4	6	4	4	3	3	0	10	0	1	7	28	7	6	6	6	3	2	21	16	32	12	25
Admin data with reimbursers	15	15	3	10	13	48	4	5	3	2	26	15	1	3	0	21	0	5	3	45	19	23	5	2	14	4	8	8	43	1	19

**Base:** All GPs. **Indicator:** D1 (cf. annex for more information), % values. **Source:** empirica, Pilot on eHealth Indicators, 2007.

## Data exchange and security

Data security is an important issue when sensitive, identifiable patient data is stored and transmitted electronically. There are a number of different techniques to make the handling of patient data secure, including password protection of the computer system and of transmitted files, encryption of transmitted files and e-mails as well as the use of e-signatures.

With relation to the use of security features French GP practices follow the general pattern found in the EU27. However, all in all use rates of security features in French GP practices stay somewhat behind the European averages.

Password protected acces is the most readily available form of data protection and therefore unsurprisingly the method most widely used. 94% of EP practices in the EU27 have established a password protected acces, with little variation between the Member States. In France, 88% of the GP practices resort to password protection acces which is one of

the lowest usage rates in Europe. An even bleaker picture appears however with regard to the use of password for the protection of transmitted files is concerned: only 39% of French GP practices resort to this solution, which makes France the last in line.

Other than the case of password protection, both encryption and the use of electronic signatures require a dedicated infrastructure, which must be present at both ends. The higher effort required by these security techniques explains why they are used by a significantly lower percentage of European GP practices.

With 36% of GP practices in France using encryption methods, they hold a solid middle position slightly below the EU27 average of 42%. The use of eSignatures varies widely across Europe. However, on average only 19% of GP practices use e-signatures. In France this concerns only 16% of GP practices.

## GPs Use of Security Features in France

	EU27	EU27+2	BE	BG	CZ	DK	DE	EE	EL	ES	FR	IE	IT	CY	LV	LT	LU	HU	MT	NL	AT	PL	PT	RO	SI	SK	FI	SE	UK	IS	NO
Password (PW) protected access	94	94	97	92	97	97	95	100	59	93	88	97	100	72	100	92	96	100	94	95	94	86	97	80	92	94	100	98	98	100	100
PW protection of transmitted files	57	57	60	77	65	71	63	76	40	56	39	59	70	41	100	45	54	57	47	62	60	63	62	62	64	69	56	27	58	83	59
Encryption of transmitted files	42	42	64	49	31	68	53	85	22	35	36	30	45	19	50	32	42	31	21	36	46	40	26	44	32	28	14	20	42	37	58
Use of e-signatures	19	19	22	68	49	93	7	58	15	24	16	11	40	13	0	12	12	7	9	28	12	11	5	12	20	19	16	41	10	43	48

**Base:** if exchange of medical data. **Indicator:** D4 (cf. annex for more information), % values. **Source:** empirica, Pilot on eHealth Indicators, 2007.

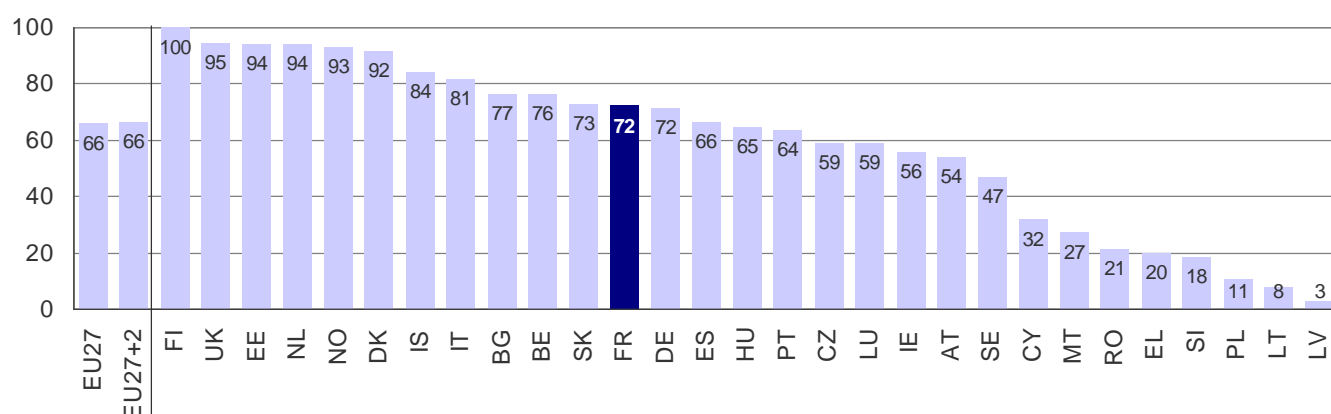
## Computer use in consultation

Apart from the storage and exchange of patient data, a computer can also be used in direct interaction with the patient, i.e. during the consultation in the practice. It can be used to display a patient's file to the practitioner, to provide supporting information when making treatment or medication decisions, but also for the explanation of medical issues to the patient, e.g. by means of a graph, photo or animation.

72% of the GPs in France use a computer in patient consultation. This result puts France once again in a mid-field

position, situated just slightly above the EU27 average of 66%. When it comes to the use of a computer in consultation with the patients, a gap can be observed between frontrunners with more than 90% of computer use (Finland, UK, Estonia, Netherlands and Denmark) and the countries following or lagging behind. The laggard group includes seven countries, where PC use for consultation purposes takes place in less than one out of three GP practices.

## Computer Use in Consultation with the Patient in France



**Base:** All GPs. **Indicator:** B2 (cf. annex for more information), % values. **Source:** empirica, Pilot on eHealth Indicators, 2007.

## Attitudes and Impacts

What role do ICTs play in the day-to-day work of a European General Practitioner? What is a GPs general attitude towards ICT and what facilitators and barriers towards a wider uptake of eHealth do they perceive? What are the impacts of eHealth?

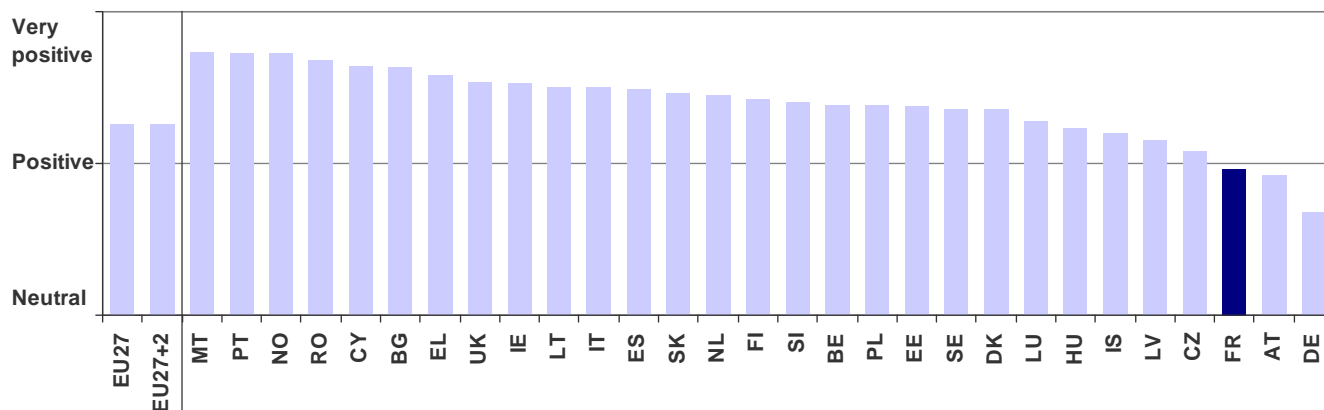
GPs in France are moderately positive when it comes to the question whether ICT really and tangibly improves the quality of health care services, as are basically all GPs in Europe. However, when compared to the other EU member states, it has to be observed that with regard to ICT solutions in the health care domain GPs in France, Germany and Austria tend to be slightly less optimistic than their other European counterparts. When looking at the other countries it is interest-

ing to see that in none of the 29 countries under observation a negative attitude is prevalent.

This positive attitude seems to have nothing to do with whether a country is more of an eHealth laggard or a frontrunner. Those countries displaying an only moderately positive attitude (such as Germany, France and Austria) are all average eHealth performers. At the same time, GPs using eHealth and practising in countries that can be considered eHealth laggards (e.g. Greece, Cyprus or Romania) show an attitude that is more positive than the EU average. Since differences between the countries in relation to the perception of facilitators and barriers as well as eHealth impacts are only small, the following analysis focuses on the EU average results, reporting national deviations where they occur.



## GPs General Attitude Towards ICT Use in Health Care in France



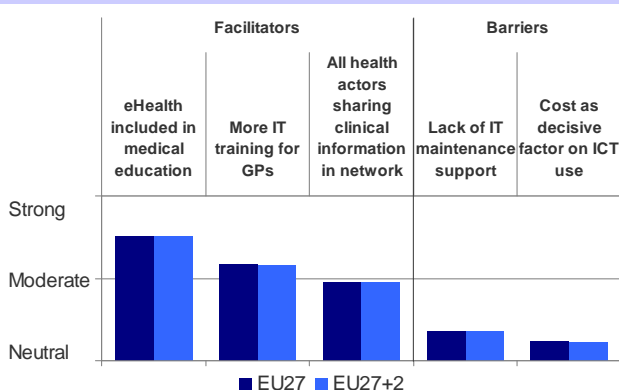
**Base:** GPs using computers. **Indicator:** F1 (cf. annex for more information), attitude scores. **Source:** empirica, Pilot on eHealth Indicators, 2007.

### Perception of facilitators and barriers

Among factors that could facilitate the diffusion of eHealth, most European GPs would prefer if the issue were included in the curricula of medical education. The second most important facilitating factor is related to IT training provided to the GPs themselves. Thirdly, a better networking of all health actors in order to share clinical information is also regarded as beneficial by a majority of GPs. Most of these preferences are shared by French GPs as well.

As regards the electronic exchange of clinical information, GPs in Germany, Poland, Iceland and Norway are less positive about this than the European average, but still mostly agree to a certain extent. On the other hand, Greek, Lithuanian and Romanian GPs are considerably more positive on this issue than their European peers. In relation to IT training for GPs, practitioners in Denmark, Germany, Hungary and the Netherlands see this as a less important issue.

### GPs Perception of Facilitators and Barriers in the EU27



**Base:** GPs using computers. **Indicator:** F1b (cf. annex for more information), agreement scores. **Source:** empirica, Pilot on eHealth Indicators, 2007.

When it comes to potential eHealth barriers, most practitioners seem — on average — to consider neither a lack of IT support nor cost as a factor that seriously hampers their use of ICT. This is the case in France as well as in most European countries. In some of the Eastern European Member States, GPs are however considerably more critical about both issues. A lack of IT support is seen as a barrier to eHealth — at least to a certain extent — by a majority. In these countries cost are

perceived as a barrier to eHealth by a noticeably larger number of GPs than in the EU on average.

Noticeable deviations from these patterns can also be found in Greece, Spain and Ireland, here a majority of GPs somewhat agrees to the statement that a lack of IT support has a negative impact on eHealth use.

### Perception of impacts

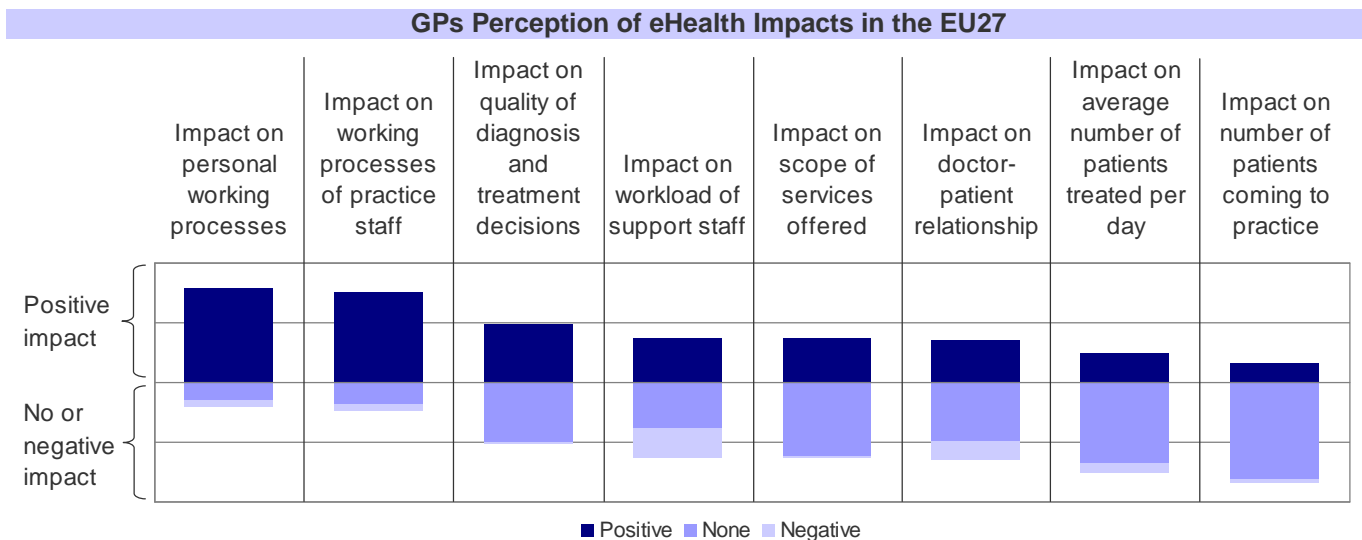
In France the perception of eHealth impacts resembles the general pattern found in the EU27 to a very high degree. Compared to the EU27 averages, the French GPs were however slightly less positive with regard to the perceived impacts.

The general impact perceptions show quite a clear pattern: the GPs are most positive about the administrative impacts of ICT use in health care, namely impacts in relation to their personal or practice staff working processes.

When it comes to patient-related or medical impacts a more ambivalent picture emerges. For every GP being positive about those impacts, there is at least one other GP not perceiving any benefit. This pattern hold true for the EU27 as a whole as well as for the French GPs in particular. This is for instance the case in relation to impact on the quality of diagnosis and treatment decisions: here about half of the GPs see positive impacts as compared to the other half seeing no impacts. In case of doctor-patient relationship and the workload of the support staff — including nurses etc. — between 16% and 25% say that the impacts are actually negative, i.e. that the relationship to the patient has deteriorated or that the workload of the support staff has gone up. The latter could indicate that the brunt of additional effort created by ICT use is not borne by the GP but by the other workers in the practice. This is also not contradicted by the perceived improvement of working processes. For the practitioner this may be due to the fact that they are not burdened with additional work generated by ICT and for the rest of the practice staff improved working processes might mean that an overall increased workload is simply handled more efficiently. About one-third of the practitioners state that the scope of services offered by the practice actually increased due to the use of IT systems and software. In France this positive impact could be discerned by 38% of GP practices. It can be assumed that for those GPs IT is not just a tool to make existing — e.g. administrative — processes more efficient but to broaden the range of their activities.

The last two areas under observation here are the impact on the number of patients treated as well as on the number of patients coming to the practice. A majority of French GPs did not experience any changes in the number of patients coming to the practice (79%) nor in the number of patients treated per day (97%) that could be related to the introduction of eHealth solutions. This goes in line with the general impression by European GPs, most of whom did not report any changes in the number of patients coming to the practice or being treated per day.

GPs from eHealth frontrunner countries tend to be somewhat more positive about impacts on personal and staff working processes and also about impacts on the quality of diagnosis and treatment decisions. They perceive a higher increase in the scope of services offered by their practice compared to their colleagues in the other countries. At the same time, negative impacts on the workload of the practice staff are deemed to be stronger.



**Base:** Users of electronic records, or access to health networks, or electronic patient data exchange. **Indicator:** F1 (cf. annex for more information), attitude scores. **Source:** empirica, Pilot on eHealth Indicators, 2007.

## Making Sense of eHealth Use Patterns in the Member States

France is among the solid average eHealth performers in the EU27. With respect to infrastructure, France scores slightly below average for computer use while attaining results somewhat above average when it comes to Internet and broadband connections. As regards the storage of patient data and the computer use in consultation, the country is close to the EU27 average. Decision Support Systems are used to a lesser extent than in other countries of the EU. The situation is very much the same in relation to electronic patient data transfer. Here too, French usage rates are either at or slightly below average.

### French policy strategies with eHealth relevance

National strategy for the optimisation and reengineering of the healthcare system, including several eHealth-related action plans

Various legislation with a bearing on eHealth, including the Healthcare Insurance Act (2004) which provides a legal framework for health IT standards and covers the creation of Electronic Health Records

Despite not having a dedicated eHealth policy strategy document bearing that name, France has a long history of health-related legislation affecting eHealth deployment. This

includes laws on data protection, telemedicine, eHealth service provision, health IT product liability and — more recently — Electronic Health Records. Among those, the law organising a secure electronic health infrastructure was enacted in 1996. Since 2004 and the Healthcare Insurance Act, there is a workgroup (GIP DMP) dealing with the planning and implementation of EHRs and — since 2007 — also with an ePrescribing scheme. One aim of the EHR scheme is to bring together the various local and regional projects dealing with electronic patient data under one, national framework.

A number of eHealth-related activities have been included under the umbrella of the wider national health system reform strategy. Current activities include the introduction of smart cards, both for identification of health professionals and insurance status verification of patients, a national health portal and several application development projects.

As can be seen from the usage data, activities carried out so far have been fairly successful in spreading eHealth use at least among General Practitioners. The upcoming development of a dedicated eHealth strategy — to be formulated by the Mission pour l'Informatisation du Système de Santé, an eHealth department of the cabinet — as well as the activities of the GIP DMP might help to streamline the large array of activities and to create further impetus in the area of electronic patient data transfer. Noting that, the recent turmoil caused by a negative result of an analysis on the overall impact of the DMP architecture can well delay developments.



## ANNEXES

### The Pilot on eHealth Indicators Study

The “Pilot on eHealth Indicators” study was carried out by empirica in association with IPSOS on behalf of the European Commission, Information Society and Media Directorate-General. The purpose of the present study was to measure the availability and use of ICT by primary care physicians in the EU27 and EEA countries, achieved by means of a survey of primary care physicians on their use of ICT for communicating with patients and between primary and secondary care and other eHealth agencies. Through this survey up-to-date information and data on eHealth developments was obtained. In addition 29 Country Briefs for each of the Member States, Norway and Iceland were developed.

### The Final Report

The Final Report of the study puts together all the results from the General Practitioner survey, including many indicators not used for this Country Profile. It also contains an extensive analysis of data, drawing a coherent picture of ICT use among General Practitioners in Europe.

#### Indicators used

The Final Report contains an indicator annex listing all statistical indicators covered by the survey, including those used for this Country Profile. The indicator codes used in the footnotes of the graphs and tables (e.g. B2, C1 etc.) can be used to identify the corresponding indicator in the list.

### Methodology Report

#### The survey

Data used for this Country Profile were collected by means of a survey of primary care physicians and their use of ICT with patients and between primary and secondary care and other health agencies.

The survey was carried out in all 27 Member States of the European Union and in Norway and Iceland. The fieldwork took place in the third quarter of 2007. It was coordinated by the German Ipsos branch Ipsos GmbH, Mölln and was conducted in cooperation with local partner institutes.

The survey was carried out in form of Computer-Aided Telephone Interviewing (C.A.T.I.). Exception is Malta where face-to-face interviews using P.A.P.I. methodology (Paper-and-Pencil Interviews) were conducted. In Sweden CATI interviews were used, until the sample was exhausted due to the specificities of the Swedish health system. The remaining interviews were accomplished through Computer-Aided Web-Interviews.

#### Universe/ Target Person and Sampling

The universe consisted of all General Practitioners in the respective countries. From the universe a random sample of practices / institutions with a quota on region and - where possible - private practice / institution was drawn. The target respondent within the practice / institution was selected via a random procedure if more than one GP were present. In total, 6,789 interviews were achieved. The sampling was done in a decentralised way and by each of the partner institutes.

## Number of Interviews Conducted

	Country	Interviews
BE	Belgium	318
BG	Bulgaria	206
CZ	Czech Republic	304
DK	France	261
DE	Germany	253
EE	Estonia	150
EL	Greece	315
ES	Spain	325
FR	France	302
IE	Ireland	206
IT	Italy	290
CY	Cyprus	72
LV	Latvia	177
LT	Lithuania	263
LU	Luxembourg	63
HU	Hungary	251
MT	Malta	92
NL	Netherlands	258
AT	Austria	299
PL	Poland	351
PT	Portugal	284
RO	Romania	304
SI	Slovenia	103
SK	Slovakia	261
FI	Finland	250
SE	Sweden	267
UK	United Kingdom	257
IS	Iceland	103
NO	Norway	204
	<b>Total</b>	<b>6.789</b>

#### Weighting schemes

After the fieldwork, weighting coefficients were computed giving each country a weight according to its population size in the respective group of countries: EU27+2 (for all 29 countries surveyed), EU27 (all EU Member States).

### More information

If you wish to be provided with more details, or to receive news and updates, please contact us at: [indeh \[at\] empirica \[dot\] com](mailto:indeh[at]empirica[dot]com) or get in touch with us.



empirica Gesellschaft für Kommunikations- und Technologieforschung mbH

**(Project Co-ordinator)**

Oxfordstr. 2, 53111 Bonn, Germany, Tel.: +49 228 985 30 0, [www.empirica.com](http://www.empirica.com)