



Hospitals' E-Learning and Information Exchange Portal

European Survey Report

Jonköping / Bruck an der Mur, September 2011

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1. Introduction

The H.E.-L.P. project follows as main objective to approach the communication channels between hospitals its staff as well as patients and other stakeholders and involved groups in the different European countries. The current situation shows that hospitals as crucial players and institutions in the health system have huge improvement possibilities in their communication activities related to their patients. The main objective of the H.E.-L.P. project is therefore to use the possibilities of modern and advanced information and communication technology to provide a communication and learning platform for patients, hospital staff and everyone involved in the health system. Hospitals should on this basis be established as central information point in the health system and so provide for comprehensive information, communication as well as learning possibilities about health and care issues for patients. A special focus in the project is made on migrants, which currently have mainly because of language barriers only reduced and limited access to information provided by hospitals. The main output of the project will be learning and communication platforms in single partner countries (AT, FI, GR, TR, IT) that will provide innovative and broad access to health and care information. The development of the platforms will be based on a common master version of the learning platform which itself is in its features and content based on the results and main findings of a European study conducted in all partner countries of the project (AT, DE, FI, IT, GR, SE and TR).

The following pages summarize the findings and main outcomes of the study performed which will be used as a basis for the further development of the project outputs. All results and outputs of the H.E.-L.P. project will also be available in electronic version for download on the project website under www.he-lp.eu. On this website also the contact information to the single project partners for further information about the performed study, its results as well as general information about the project and outputs is available.

Jonköping / Bruck an der Mur, September 2011

2. Methodological background

The European survey conducted within the H.E.-L.P. project can be characterized on methodological level by the following criteria:

- a) **Empirical level:** on empirical level the H.E.-L.P. survey builds on one hand on conducted interviews with the target groups in all partner countries as well as on a performed desk research for the analysis of existing hospital websites in all partner countries and beyond.
- b) **Semi-open interview questionnaires:** the questionnaires used for interviewing the members of the identified target groups in the partner countries can be characterized as semi-open questionnaires (see annex), which allow a selection of preferences and wishes of the target group together with the possibility to express a more qualitative opinion about the selection made or even suggest further possibilities that are not mentioned by the closed questions.
- c) **Semi open analysis grid for websites:** based on the best practices for the analysis of website already in use by the Swedish research partner, the partnership used a semi-open analysis grid for different performance and content criteria of hospital websites (see annex).
- d) **Target groups:** For the empirical part of the European survey the partnership identified the following two main target groups:
 - I) Patients, potential patients and citizens
 - II) Hospital staff (physicians, care staff, administrative staff, IT staff and experts)
- e) **Sample selection for questionnaire based interviews:** The sample for the questionnaire based interviews consisted of 35 interviewees from each of the 6 participating partner countries (AT, FI, IT (2 partners), GR, TR and SE) counting to a maximum of n=245 planned for the questionnaire based survey part. Within the group of 35 interviewees per participating country it was planned that:
 - I) 50% come from the group of patients, potential patients and citizens
 - II) 40% come from the hospital staff group (physicians, care staff, administrative staff)
 - III) 10% come from the IT expert staff (using the dedicated staff questionnaire)

Finally the partnership managed to collect altogether 270 interviews which extended the planned n=245 to n=270.

- f) **Weighting of scores:** To allow a better differentiation of scores within the preferences the interviewees choose, the questionnaire did foresee a weighting system telling that interviewees should attribute 3 points to their first choice (prime selection), 2 to the choice the prefer second and 1 to the choice the prefer third. All other alternatives have not been selected. This weighting allows a better splitting of results and a clearer interpretation of preferences from single partner organization as well as in total.
- g) **Data processing and interpretation:** the collected interviews have been processed in an Excel based tool by all partners and sent to the Swedish research phase co-ordinator for further processing and deduction of results. During the second partnership meeting of the project the whole partnership has been presented the deductions and data results and a discussion has been initiated about the critical success factors of an IT based learning and information platform for patients and hospital staff.

- h) **Finalisation of the study:** Besides this the project partners evaluated each a number of 15 hospital websites with the help of the analysis grid. The results of this analysis have also been elaborated further by the Swedish research partner and results have been presented to the partnership during the second partnership meeting in September 2011.

The following chapters will present the results of the European survey conducted in the partner countries together with first interpretations of results and careful deductions for the characteristics of a learning and information platform of hospitals that should be developed.

3. Results of questionnaires for patients, potential patients and citizens in the partner countries

3.1. Age

Tab. 1.

	under 20 years	20-40 years	41-60 years	over 60 years	total
Turkey	5	12	13	0	30
Italy (AZUR)	0	9	9	2	20
Finland	4	8	3	5	20
Greece	1	13	6	0	20
Austria	1	7	6	6	20
Italy (AOR)	1	10	7	1	20
Sweden	1	6	1	0	8
total	13	65	45	14	138

The results of the patients and potential patients survey show that the majority of the answers come from persons between 20 and 40 years of age, followed by interviewees from 41 to 60 years of age.

3.2. Gender

Tab. 2.

	Male	Female	total
Turkey	13	17	30
Italy (AZUR)	7	13	20
Finland	9	11	20
Greece	4	16	20
Austria	7	13	20
Italy (AOR)	9	10	19
Sweden	3	5	8
total	52	85	137

The gender distribution shows that the answers are mainly driven by female interviewees, despite the fact that partners have tried to get a equal gender balance, especially in Greece predominantly female interviewees have been identified.

3.3. Highest finished education level

Tab. 3.

	primary school	lower 2ndary	upper 2ndary	vocational	university	total
Turkey	6	5	3	9	7	30
Italy (AZUR)	4	6	2	4	6	22
Finland	2	4	2	7	5	20
Greece	0	0	3	1	16	20
Austria	2	4	3	5	6	20
Italy (AOR)	0	5	1	8	5	19
Sweden	0	0	3	0	5	8
total	14	24	17	34	50	139

The figures show that the results are mainly given by academic persons with university degree followed by people with finished vocational degree. It is important to interpret the results under this light, since they may drive the information and learning platform into a quite academic direction which is basically not intended by the project.

3.4. Desired topics in the prevention field

Asked about the most desired topics that a hospital should provide information on within the field of prevention of diseases as first step and information level the interviewees made the following selection:

Tab.4.

	Drug misuse	addiction topics	nutrition	stress & mental health	STD:s	contra-ception	healthy lifestyle	diabetes	maternity issues	other	total
Turkey	47	21	45	28	5	7	19	7	1	0	180
Italy (AZUR)	18	19	20	17	14	5	17	6	6	0	122
Finland	10	14	12	19	7	1	29	25	3	0	120
Greece	14	22	8	38	17	2	8	7	3	1 (heart disease prevention)	120
Austria	9	5	34	18	2	0	38	14	1	0	121
Italy (AOR)	11	15	23	16	17	6	20	0	3	3 (Back ache)	114
Sweden	4	6	13	9	5	2	6	1	2	0	48
total	113	102	155	145	67	23	137	60	19	4	825

The analysis of data shows clearly that people want to learn about the topics of nutrition followed by stress and mental health as well as a general healthy lifestyle. The topic about drug misuse is ranked pretty high in Turkey and partially in Italy however not on a general partnership level, this also corresponds with the results received in the staff questionnaire interpretation.

3.5. Preferred topics on the level of diagnosis methods offered

The second information and learning level established in the questionnaire and also in the planned information platform is about the available diagnosis methods of a particular hospital. The interviewees ranked different information topics for this thematic level in the following order:

Tab. 5.

	methods offered	getting familiar with staff etc	personal risks	results and interpretation	time needed	alternative methods	others	total
Turkey	27	35	42	31	30	15	0	180
Italy (AZUR)	38	18	15	22	7	20	0	120
Finland	11	10	21	23	33	24	0	122
Greece	36	16	14	31	9	14	0	120
Austria	48	34	9	11	7	10	0	119
Italy (AOR)	33	9	28	23	6	15	0	114
Sweden	7	5	13	7	10	6	0	48
total	200	127	142	148	102	104	0	823

Most of the participants want general information about the available diagnosis methods (interventional and non-interventional) and at the same time want to get support and information concerning the interpretation of results received (although this topic is never ranked top at any of the partners) and personal risks attached to different methods offered.

3.6. Preferred information about available medical treatment

The participants ranked the priority topics in the field of the available medical treatment possibilities of a particular hospital in the following order:

Tab. 6.

	main offers	getting familiar w/ staff	personal risks	guide-lines followed	price	alternative methods	specialised areas	other support services	time schedules	patients' roles	other	total
Turkey	15	19	37	28	11	13	7	9	20	21	0	180
Italy (AZUR)	25	10	23	8	13	12	8	8	8	5	0	120
Finland	14	0	31	16	19	1	12	8	18	2	0	121
Greece	23	7	18	6	15	9	6	23	4	9	0	120
Austria	37	31	9	4	0	14	16	4	3	1	0	119
Italy (AOR)	33	4	32	5	7	7	4	8	3	12	0	115
Sweden	13	2	6	1	4	2	5	2	7	5	0	47
total	160	73	156	68	69	58	58	62	63	55	0	822

The majority of interviewees want to get information and learning possibilities about the main offers of medical treatment in particular hospital (or department) followed by the personal risks attached to different treatment methods. Also quite interesting appears the fact that people have the wish to get familiar with the staff prior to the visit to the hospital (e.g. by a short introduction video, pictures etc.).

3.7. Preferred learning and information topics in the area of care and rehabilitation

Characterizing the overarching process of care and rehabilitation in a hospital people would prefer to have the following information and learning content:

Tab. 7.

	general organization	the care environment	support services offered	NGOs	getting familiar w/ staff	experts offered	funding	patients' roles	others	total
Turkey	34	32	23	9	17	29	14	22	0	180
Italy (AZUR)	22	22	1	19	15	21	14	6	0	120
Finland	28	6	14	12	3	27	16	14	0	120
Greece	13	30	20	10	14	15	8	9	0	119
Austria	18	21	14	9	34	17	0	6	0	119
Italy (AOR)	9	12	12	19	4	31	16	11	0	114
Sweden	8	8	9	0	5	6	0	11	0	47
total	132	131	93	78	92	146	68	79	0	819

Most important appears if the hospital offers certain kinds of specialized experts for care and rehabilitation related to different special diseases. This is followed by content around the general organization of care as well as information about the care environment. The patient roles in the care process seem to be least interesting.

3.8. Preferred general information topics

Besides medical treatment of a special department, the platform should also offer information and communication possibilities about general topics of the hospital or the special department. Asked about their topic preferences, the interviewees gave the following answers:

Tab. 8.

	address, contact data etc	different language versions	how to reach the place	admission requirements	patients' rights	info for migrants	quality policy	map of hospital	first aid info	total
Turkey	34	32	23	9	17	29	14	22	0	180
Italy (AZUR)	22	22	1	19	15	21	14	6	0	120
Finland	28	6	14	12	3	27	16	14	0	120
Greece	13	30	20	10	14	15	8	9	0	119
Austria	18	21	14	9	34	17	0	6	0	119
Italy (AOR)	9	12	12	19	4	31	16	11	0	114
Sweden	8	8	9	0	5	6	0	11	0	47
total	218	81	96	55	103	40	89	45	92	819

In this section information about addresses, contacts etc. are clearly dominating, followed by information about the patients' rights and how to reach the place.

3.9. Interaction possibilities

Besides questions about the desired learning content that should be provided on an information platform of hospitals, participants have also been asked about preferred interaction possibilities between them as patient, potential patient or citizen in general and the hospital and its staff. The picture received does clearly support the work and objectives of the H.E.-L.P. project:

Tab. 9.

	dedicated communication office	online interaction w/ patients	arrange appointments online	info about events and news	web 2.0	others	total
Turkey	27	67	46	26	14	0	180
Italy (AZUR)	38	32	21	17	12	0	120
Finland	37	26	22	29	6	0	120
Greece	27	42	39	4	5	2	119
Austria	31	27	26	23	8	0	115
Italy (AOR)	31	28	34	11	7	0	111
Sweden	18	17	11	1	1	0	48
total	209	239	199	111	53	2	813

The majority of interviewees want to have online interaction possibilities between them and the hospital especially prior to a visit to the hospital. This is followed by the wish for a dedicated communication office offered by the hospital and the possibility of arrange appointments online. These wished however, the most clear they are expressed, present the largest challenge for the development of the information platform from ethical and data protection perspectives. In depth discussions within the partnership and related to single countries' policies are needed prior to the development.

3.10. Information formats

To support the discussion and development of the platform on didactical but also technical level, patients have been asked to chose between different information formats they prefer.

Tab. 10.

	virtual tour	text info	short vid- eos	pictures	online lec- tures	download- able info	games	external links	web 2.0	self tests	virtual tour	total
Turkey	10	27	28	15	30	21	3	2	6	10	27	179
Italy (AZUR)	23	17	8	7	20	9	1	12	6	23	17	143
Finland	16	36	12	17	3	13	2	4	9	16	36	164
Greece	10	13	20	14	12	20	3	9	2	10	13	126
Austria	26	11	43	20	7	3	5	1	0	26	11	153
Italy (AOR)	15	24	9	3	17	17	3	6	7	15	24	140
Sweden	2	14	0	6	2	12	0	5	0	2	14	57
total	102	142	120	82	91	95	17	39	30	102	142	962

Surprisingly patients still prefer text information to other formats. This is then however followed by the wish for short videos supporting the information, a virtual tour through the hospital and downloadable information. Games and web 2.0 offers are ranked lowest by this target group!

3.11. Trust in information provided

One of the biggest problem of the internet is trust information. Especially in the health sector 99% of the information provided in the internet about diseases, treatment, outcomes etc. is wrong or incomplete. Therefore it was assumed that information directly provided by a learning platform of a local hospital / department receives more trust from patients and citizens than other health information found in the internet. This assumption is at least partially confirmed by the results of the patients survey:

Tab. 11.

	Totally	Partially	Partially not	Totally not	total
Turkey	22	8	0	0	30
Italy (AZUR)	5	13	0	2	20
Finland	6	12	3	0	21
Greece	7	13	0	0	20
Austria	6	12	2	0	20

Italy (AOR)	11	6	1	1	19
Sweden	4	4	0	0	8
total	61	68	6	3	138

The vast majority in all countries would totally or at least partially trust the information provided on such information and learning platform, only a small minority of 9 interviewees give a negative answer on this question.

3.12. Need for a European quality label for information and websites

One of the aims of the H.E.-L.P. project is also the development of a European quality label for hospital websites and information provided. This quality label should finally guarantee that the information provided on a platform is true and follows a number of clear quality criteria. Asked about the trust in and need for such a European quality label (although this has only been presented as a very vague concept) participants show the following picture:

Tab. 12.

	Totally	Partially	Partially not	Totally not	total
Turkey	10	10	0	10	30
Italy (AZUR)	8	8	1	3	20
Finland	11	6	2	0	19
Greece	12	8	0	0	20
Austria	4	14	2	0	20
Italy (AOR)	10	8	0	1	19
Sweden	1	1	4	2	8
total	56	55	9	16	136

For most of the countries a European quality label would raise trust and there seems to be a need for the development of a particular quality award. Sweden and Turkey are notable exemptions from this general perspective.

3.13. Could the information platform and its offers replace a visit to a physician?

A more provocative question was raised about the issue if such an information platform and tool is able to replace a visit to a physician if patients feel the need to see a doctor. The answers received are however quite critical:

Tab. 13.

	Yes	No	Totally not	total
Turkey	10	20	"Don't make a physical examination" (9 comments) "Fallible" (7) "Unreliable" (4)	30
Italy (AZUR)	11	9	"It is important physical examination" (8) "impossible" (1)	20
Finland	17	3		20
Greece	3	17	"Only partially" (5) "It is not sufficient. Physical contact with doctor is necessary results." (11)	20
Austria	7	13	"Possibility for misinformation" (1) "Cant be trusted online" (1)	20
Italy (AOR)	2	16	"It may not be truthfully" (1) "The physician assessment it is necessary" (2) "Direct contact is necessary" (9) "Patients have no necessary competencies" (5)	18
Sweden	5	3	"The text format is limited and some questions will never be asked. Information will be left out. A web page cannot replace a human brain." (1) "Internet provides one-way communication. Reading about disease makes people worry, why a dialogue with a physician is always preferred." (1) "A checklist or self-test does not cover everything. A physician understands what the patient is trying to express, regardless of the exact wording." (1)	8
total	55	81		136

On the basis of these results the tool to be developed could only be an additional information, communication and learning source, it cannot be believed that the majority of people would not need to see a physician after visiting the information platform, however this was also not the aim of the H.E.-L.P. project and does not influence the development steps made.

3.14. Would participants use such an e-learning and information platform?

The final question of the questionnaire asked participants about their estimation if they would actually use an information platform provided by their local hospital (hospital department). The answers received are quite promising:

Tab. 14.

	frequently	occasionally	never	total
Turkey	20	10	0	30
Italy (AZUR)	16	13	1	30
Finland	4	16	0	20
Greece	12	8	0	20
Austria	4	15	1	20
Italy (AOR)	8	11	0	19
Sweden	1	7	0	8
total	65	80	2	147

Only 2 participants stated that they will never use such a learning and information platform. The majority will occasionally or even frequently use a learning platform.

4. Results from the questionnaire for hospital staff and IT experts

4.1. Age

Tab. 15.

	under 20 years	20-40 years	41-60 years	over 60 years	total
Turkey	0	22	8	0	30
Italy (AZUR)	0	10	9	1	20
Finland	0	11	9	0	20
Greece	0	3	17	0	20
Austria	0	9	6	0	15
Italy (AOR)	1	6	11	0	18
Sweden	0	1	6	1	8
total	1	62	66	2	131

The picture regarding the age category the interviewees belong to is similar to the patients survey. Most of the participants come from the group of 41 to 60 years, closely followed by age group 20 to 40 years of age.

4.2. Gender

The gender distribution is in general also similar to the patients' survey:

Tab. 16.

	Male	Female	total
Turkey	8	21	29
Italy (AZUR)	4	16	20
Finland	4	16	20
Greece	17	3	20
Austria	7	8	15
Italy (AOR)	6	12	18
Sweden	5	3	8
total	51	79	130

Apart from Greece with a clear male dominance, the sample contains nearly 2/3 female staff and 1/3 male staff.

4.3. Staff group distribution

The distribution of interviewees to the different staff groups shows the following picture:

Tab. 17.

	medical staff	care staff	other care staff	other professional support staff	administrative staff	Total
Turkey	1	17	0	4	8	30
Italy (AZUR)	5	9	1	1	4	20
Finland	4	13	3	0	0	20
Greece	18	0	0	2	0	20
Austria	9	2	1	0	3	15
Italy (AOR)	2	4	2	1	9	18
Sweden	3	4	0	1	1	9
total	42	49	7	9	25	132

The majority of answers come from medical staff (physicians) and care staff, followed by administrative staff and other professional support staff (including IT staff). This staff grouping is coherent with the desired staff sample established for the staff questionnaire survey.

4.4. Years of professional experience

Corresponding with the age of the interviewees it appeared also important to ask about the number of years of professional experience in the health system. It was intended to cover several years categories to have experienced staff members that know the system and problems well and can be critical related to developments and ideas as well as staff with less years of professional experience in the health system to allow support for innovative ideas and change also in the questionnaire. The picture received supports the quality of the sample in this category:

Tab. 18.

	0-5 years	6-10 years	11-20 years	21-30 years	over 30 years	Total
Turkey	7	9	6	7	1	30
Italy (AZUR)	5	4	6	3	2	20
Finland	0	9	6	5	0	20

Greece	1	2	12	5	0	20
Austria	4	5	3	3	0	15
Italy (AOR)	4	5	3	3	3	18
Sweden	0	0	2	3	3	8
total	21	34	38	29	21	131

The years of professional experience are quite evenly distributed between the established categories. Exemptions are Sweden and Finland where no persons with less than 6 years of professional experience in the health system are part of the survey.

4.5. Preferred topics in the field of prevention of diseases

Asked about the topics staff prefers to be presented in electronic information and learning platform the hospital staff answered in the following manner:

Tab. 19.

	drug misuse	addiction topics	nutrition	stress & mental health	STD:s	contra-ception	healthy life-style	diabetes	maternity issues	total
Turkey	45	15	37	26	6	10	28	6	7	180
Italy (AZUR)	12	18	19	26	15	3	15	3	6	117
Finland	3	3	5	11	6	0	7	6	1	42
Greece	8	16	38	24	3	1	17	12	0	119
Austria	2	8	24	20	6	6	12	7	5	90
Italy (AOR)	9	13	24	25	11	1	16	3	4	106
Sweden	3	2	6	11	6	0	7	5	5	45
total	82	75	153	143	53	21	102	42	28	699

The picture is similar to the answers of the patients and potential patients. The majority of staff prefers to present content about nutrition, stress and mental health as well as generally on healthy life-style issues.

4.6. Preferred topics around diagnosis of diseases

The staff representatives of the hospitals have clear preferences regarding information about diagnosis processes in their hospital to be presented on an information platform.

Tab. 20.

	methods offered	getting familiar with staff etc	personal risks	results and interpretation	time needed	alternative methods	others	total
Turkey	54	32	39	26	9	20	0	180
Italy (AZUR)	40	21	20	19	13	7	0	120
Finland	11	24	30	14	39	3	0	121
Greece	38	32	9	19	8	11	3	120
Austria	28	15	16	8	11	11	0	89
Italy (AOR)	28	9	23	26	11	11	0	108
Sweden	15	6	14	2	4	7	0	48
total	214	139	151	114	95	70	3	823

Similar to the pattern shown at the patients' questionnaires, staff prefers a general presentation of the diagnosis methods offered, followed by the personal risks attached to them and also a presentation of staff to be better familiarized with the personnel working in the diagnosis process.

4.7. Preferred topics in medical treatment section

The picture the staff presents about their selection of topics around the medical treatment possibilities they are offering appears also quite clear and easy to interpret.

Tab. 21.

	main offers	getting familiar w/	personal risks	results	guide-lines followed	price	altern-active methods	specialized areas	other support ser-	time schedules	patients' roles	total
Turkey	35	21	25	21	27	8	13	11	7	7	6	181
Italy (AZUR)	30	14	18	13	12	5	2	6	14	6	2	122
Finland	3	4	6	18	10	17	0	8	5	22	26	119
Greece	30	8	3	21	15	3	1	14	11	2	11	119
Austria	22	8	4	1	6	3	9	14	5	6	11	89
Italy (AOR)	22	5	19	15	10	10	5	9	1	6	5	107
Sweden	18	4	9	8	0	2	6	0	0	0	1	48
total	160	64	84	97	80	48	36	62	43	49	62	785

Although there are some small deviations from the picture and estimation given by the patients and potential patients, the staff prefers topics around the general treatment methods, followed by a presentation about results and personal risks attached to different treatment approaches.

4.8. Selected topics around care and rehabilitation

From the perspective of the staff of the asked hospitals the following subjects are preferred in the section about care and rehabilitation processes of hospitals:

Tab. 22.

	general organization	the care environment	support services offered	NGOs	getting familiar w/ staff	experts offered	funding	patients' roles	total
Turkey	44	34	14	7	26	10	13	44	192
Italy (AZUR)	29	25	18	10	4	21	8	29	144
Finland	0	1	2	0	0	3	0	0	6
Greece	28	21	14	6	17	23	3	28	140
Austria	22	16	2	15	10	9	7	22	103
Italy (AOR)	18	14	9	16	5	36	6	18	122

Sweden	8	9	3	7	3	10	1	8	49
total	149	120	62	61	65	112	17	149	756

The picture received is totally similar to the patients' survey, general organizational topics are in front, followed by presentation of the care environment and specialization areas for care and rehabilitation of certain diseases.

4.9. Selection of topics for general information section

Asked about the topics staff would select to be presented in a general information section of the learning platform, the picture appears slightly different from the patients' survey:

Tab. 23.

	address, contact	different language	how to reach the	admission require-	patients' rights	info for mi-grants	quality pol-icy	map of hospital	first aid info	total
Turkey	65	16	31	17	17	1	13	6	65	231
Italy (AZUR)	34	10	9	11	17	7	3	7	34	132
Finland	2	16	4	6	27	7	20	2	2	86
Greece	37	11	18	12	5	3	9	7	37	139
Austria	22	9	5	7	18	2	3	18	22	106
Italy (AOR)	26	7	11	6	8	4	7	12	26	107
Sweden	21	6	8	6	1	0	4	0	21	67
total	207	75	86	65	93	24	59	52	207	868

The majority of the staff representatives would prefer general contact information, followed by information about first aid and emergency care (especially preferred by Finland and Italy) and a presentation of patients' rights.

4.10. Preferred interaction possibilities

The picture about the preferred interaction possibilities for communication between patients and hospital staff appears very similar to the one received from the patients' survey:

Tab. 24.

	dedicated communication office	online interaction w/ patients	arrange appointments	info about events and news	web 2.0	other	total
Turkey	65	40	26	36	13	0	180
Italy (AZUR)	45	39	25	9	1	1 develop how to access to health facilities	117
Finland	32	18	29	12	26	0	120
Greece	36	32	36	10	4	1	119
Austria	25	15	18	18	10	0	86
Italy (AOR)	16	39	39	10	4	0	108
Sweden	13	15	13	1	0	1 SMS reminder	43
total	232	198	186	96	58	3	773

The majority would prefer an own and dedicated information and communication office followed by different formats of online interaction and do also vote for the possibility to arrange appointments in the hospital online.

4.11. Preferred didactical and technical formats

The perspective and estimation of hospital staff concerning the preferred didactical and technical ways of presenting information and learning content on the platform shows the following picture:

Tab. 25.

	virtual tour	text info	short videos	pictures	online lectures	downloadable info	games	external links	web 2.0	self tests	total
Turkey	34	36	28	4	19	19	5	6	11	18	180
Italy (AZUR)	30	20	10	2	14	29	3	4	2	6	120
Finland	13	19	4	22	1	11	0	3	29	18	120

Greece	32	10	23	11	12	22	3	1	2	4	120
Austria	20	7	2	15	4	3	0	2	1	13	67
Italy (AOR)	23	6	6	2	23	34	0	2	4	5	105
Sweden	6	13	5	2	5	4	0	4	0	9	48
total	158	111	78	58	78	122	11	22	49	73	962

Providing a virtual tour through the hospital or the department appears as first priority followed by classical text based information and information provided for download (e.g. fact sheets about diseases, treatment, rehabilitation etc.) Least important appear (similar to the estimation of the patients) web 2.0 possibilities as well as games.

4.12. Expected main benefits of an information and learning platform

Asked about the expected benefits a hospital or department could have from implementing such a learning and information platform, the hospital staff located highest benefits on the level of quality improvement:

Tab. 26.

	more prestige			better service quality			economical benefits			reduction of patients		
	yes	partly	no	yes	partly	no	yes	partly	no	yes	partly	no
Turkey	25	5	0	22	7	1	19	5	6	3	10	17
Italy (AZUR)	10	8	2	19	1	0	12	6	2	10	8	2
Finland	9	11	0	10	9	1	2	8	10	5	9	5
Greece	14	4	2	14	4	2	13	5	2	13	3	4
Austria	9	5	1	11	2	2	3	6	6	2	5	8
Italy (AOR)	8	6	1	17	1	0	3	9	3	7	8	0
Sweden	4	1	3	8	0	0	7	1	0	7	0	1
total	79	40	9	101	24	6	59	40	29	47	43	37

The picture also shows that staff does not so much expect a reduction of patients during such an instrument which appears also coherent with the patients' answer, that the tool would not be able to replace a visit to the doctor or physician.

4.13. Additional questions

A number of semi open additional questions have been asked to the hospital staff mainly about any concerns they would raise, if they would expect non desirable consequences for a hospital when using an information and learning platform etc. The qualitative information provided by the staff representatives will be taken into account during the development phase and it can be found in detail in the annex to this survey report.

5. Website analysis results

5.1. Introduction

The third approach followed in the European survey of the H.E.-L.P. project has been the desk research based analysis of existing websites of hospitals in order to get a clearer picture about the status quo of the online offer of hospitals in the partner countries and beyond. On the other hand the aim of the website analysis phase was also to identify possible examples of good practices in the partner countries that could be taken for the development of the H.E.-L.P. information and learning platform.

The research was based on a website analysis grid developed by the Swedish project partner the Jonköping Business School which has long lasting and huge experiences with the development of IT based services for health systems and e-health processes. The website analysis grid is a validated instrument for identifying the quality of health websites and focuses on crucial issues around hospital websites related to their services for patients etc.

The involved project partners from AT, IT (2 partners), FI, GR, SE and TR performed a desk research of websites aiming at a number of 15 websites analyzed per partner organization achieving an n=105. However it was luckily possible to analyze even more websites than requested, so finally the amount of websites analyzed by the partners is n=126. Also the partnership managed to analyze websites localized outside the partner countries and did also fulfill the requirements of the application in that respect. However the results from the analysis of websites coming from outside the partner countries have been processed separately from the partner countries' websites to allow a better and clearer picture.

The questions and indicators established for the website analysis can be found in total in the annex of the study report. In the following paragraphs the main outcomes of the analysis will be shown.

5.2. Main results received from website analysis

- Publication of waiting times online for an appointment, surgery or other medical treatment is mainly shown on websites from FI, TR and IT. In Austria and Greece none of the website analyzed did show this information.
- Booking appointments via the website is quite common in Sweden, Finland, Turkey and partially Italy, no possibility is offered in Austria and hardly also in Greece
- Again TR, SE and FI do offer clear possibilities to send comments about the websites to the editor of the page, this quality service is hardly offered in AT, FR and partially Italy.
- Providing rules and conditions for payment for treatment etc. is shown on websites from Finland, Turkey and partially Italy, this however is connected with the setup of the health system and insurance companies covering the costs for medical treatment. In Austria e.g. there is no use to provide this information, since all costs for medical treatment are covered by the compulsory health insurance institution.

- Only in Turkey and Italy patients get a password to get more classified information via some of the hospital websites. In all other countries this service is not offered partially because of technical limitations and mainly because of data protection and ethical reasons. Most websites do not differentiate between different visitor categories for their websites may it be physicians or potential patients.
- Sweden and Turkey appear extremely fast forward in offering modern communication and interaction possibilities based on web 2.0 technology (blogs, blog like news section, updated information channel), other countries do hardly offer these services (partially in Finland and Italy)
- The educational and learning function of a hospital website or platform is generally hardly used sufficiently by hospitals and the health systems in general, however again Sweden and Turkey do offer educational services on some of their hospital websites. Especially Austria and Greece do fall short in that respect.
- Quite common appear general information provision like internal guides, maps and walk in guides in all partner countries.
- In general the picture received shows that there are some benchmarks available in modern IT based communication and information of hospitals mainly from Sweden and Turkey, partially also from Finland and Italy. However the whole picture shows that there is a huge space for improvement and space for the H.E.-L.P. project results (web based learning and information platform) in all partner countries
- Austria and Greece do clearly show shortcomings on nearly all levels of IT based communication of hospitals
- The results from the countries beyond the partnership (Slovakia, Czech Republic and Hungary) do support the same picture and can also be seen as potential user market for the H.E.-L.P. project outputs.

6. Conclusions

The surveys conducted as well as the desk research based analysis of websites brought a number of significant and important results for the further development of the web based learning and information platform. The preliminary results based on raw data have been discussed within the project partnership during the second partnership meeting in September 2011 in Italy. They have also been channeled into a collection of key factors relevant for the development of the information and learning portal which will be elaborated as a separate output of the project. Nevertheless on the basis of the received results and scores from the research activities the following general conclusions can be drawn:

- Patients, potential patients, citizens as well as staff in the health system have a pretty similar picture of what should be presented on an information and learning platform provided by a hospital. This is of course very welcomed in the project since this will make it easier to satisfy both parties finally with a common instrument
- Healthy lifestyle issues(including nutrition, physical exercise but also mental wellbeing issues like stress prevention, prevention of burn out syndrome, depression etc.) are the most important general prevention topics identified
- General information about diagnosis methods and medical treatment methods should be provided on the learning platform (patients would wish to get informed about personal risks attached and time needed for different approaches whereas staff would wish to provide information about outcomes, excellence of departments and quantitative data about the quality of the department)
- Care and rehabilitation is generally more important for patients and citizens than for the staff, however only general information is requested on this topic, it appears especially interesting for patients how the care process interfaces with the medical treatment process, that interface should be especially emphasized when providing information.
- The general information provided by hospitals should go beyond providing contact data, phone numbers and email addresses; it should lead into a virtual communication office covering the interface between the hospital and the external world.
- Text information is preferred as no. 1 by both parties followed by short videos and information available for download, games and web 2.0 approaches are seen critically
- Online interaction is very much requested by the patients regarding e.g. arranging appointments in the hospital online, interaction with physicians prior to a visit to the hospital, interactions with the care staff after leaving the hospital for any questions. This issue however needs to be discussed in detail because of legal, ethical and forensic restrictions in the partner countries. National versions of the learning platform may differ considerably from each other in this issue
- Patients would give enough trust in a learning platform and the content provided by a local hospital, it would however not be able to replace a visit to a physician. This is also supported by the staff perspective that would not see a reduction of patients in the hospital because of

this instrument. Nevertheless the platform and the need to provide validated and quality information has the potential to increase the general service quality of a hospital

- In all partner countries (even beyond) there is a huge need for an information and learning platform offered by a hospital to increase communication and learning possibilities on both sides (patients, potential patients and hospital staff). Some countries appear more advanced regarding IT based health systems (Sweden, Finland, partially Turkey) other countries have considerable shortcomings and catch up potential (Austria, Greece, partially Italy).

7. Contacts

For further information about results and interpretation of the results received please contact the authors and responsible partner for the implementation of the European survey:

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8. Annexes

8.1: Questionnaire for citizens and potential patients

H.E.-L.P. European Survey

I. Citizens and potential patients

The H.E.-L.P. Hospital's E-learning Portal Project is aiming at the development of an online information portal of hospitals for their patients, future patients, people of kind and friends as well as medical staff to improve their mutual communication, inform about offers and treatment and in general lower the barrier between patient and hospital through better and modern information and interaction. The first step for the development of such an information portal and platform is a European wide study of needs and interests of patients, people of kind, friends, medical staff, care staff, administrative staff from hospitals.

We would like to ask you for your support for our study with answering the following questionnaire. The questions raised are exclusively asking for your personal opinions and preferences, your answers are a valuable contribution to the development to the information portal. All answers will be treated anonymously respecting data protection laws. The results of the European Survey implemented will be available for your convenience soon on the project's website under: www.he-lp.eu

1.1 To which age category do you belong?

- Under 20 years
- 21-40 years
- 41-60 years
- Over 60 years of age

1.2 Your sex is?

- Male
- Female

1.3 My highest finished educational level is:

- Primary school
- Lower Secondary School
- Upper secondary School
- Vocational education diploma
- University / higher education diploma

2. Thinking of an IT based information portal offered by a hospital focusing on **prevention of diseases**, which issues and topics would you like to have information about in this web based tool for patients online?

(Please select **max. three topics** and mark with (3) the most important, (2) the second important, (1) the third important)

2.1 Drug misuse (related to medications) 1 2 3

2.2 Addiction topics (nicotine, alcohol, other drugs) 1 2 3

2.3 Nutrition (healthy nutrition, effects of nutrition on physical fitness, cancer prevention etc.) 1 2 3

2.4 Stress, depression and mental health issues 1 2 3

2.5 Sexually transmitted diseases 1 2 3

2.6 Contraception 1 2 3

2.7 Healthy lifestyle, physical fitness and activity 1 2 3

2.8 Diabetes 1 2 3

2.10 Maternity issues in general 1 2 3

2.11 Other: 1 2 3

Please indicate: _____

3. The **diagnosis of diseases** is one important offer of hospitals, different methods, instruments and techniques are available in every department and hospital. Considering this, which issues and topics would you like to have information about in this web based tool for patients online?

(Please select **max. three topics** and mark with (3)the most important, (2)the second important, (1)the third important)

3.1 Diagnosis methods offered in the hospital 1 2 3

3.2 Getting familiar with staff, instruments, techniques etc. (through pictures and short videos)

1 2 3

3.3 Personal consequences (risks) attached to different diagnosis methods 1 2 3

3.4 Results of diagnosis methods and support with interpretation of results (e.g. blood interpretation) 1 2 3

3.5 Time needed and diagnosis process with different methods 1 2 3

3.6 Possible alternatives to different methods offered 1 2 3

3.7 Other: 1 2 3

Please indicate: _____

4. Besides diagnosis the main offer of a hospital is **medical treatment**. Which information would you like to obtain prior to a hospital visit about medical treatment in this web based tool for patients online?

(Please select **max. three topics** and mark with (3)the most important, (2)the second important, (1)the third important)

4.1 Main offers of medical treatment 1 2 3

4.2 Getting familiar with staff and instruments (through pictures and short videos) 1 2 3

4.3 Personal risks attached to different treatment forms 1 2 3

4.4 International guidelines for medical treatments followed in the hospital 1 2 3

4.5 Price of different treatments (in case of non coverage by insurances) 1 2 3

4.6 Alternative methods to medical treatment methods 1 2 3

4.7 Specialized treatment areas of the particular hospital / department 1 2 3

4.8 Offered support services accompanying the medical treatment (e.g. psychological support, physiotherapy, occupational therapy, speech therapy etc.) 1 2 3

4.9 Time schedules for medical treatment 1 2 3

4.10 Patients roles and responsibilities in the treatment process (compliance needed, attitudes supporting the success, motivation issues etc.) 1 2 3

4.11 Others: 1 2 3

Please indicate: _____

5. Diagnosis and medical treatment are accompanied by **care and rehabilitation offers** and services in a hospital. Related to the issue of care and rehabilitation, which issues and topics would you like to have information about in this web based tool for patients online?

(Please select **max. three topics** and mark with (3)the most important, (2)the second important, (1)the third important)

5.1 General organization of care in the hospital (approaches, rooms, services offered etc.) 1 2 3

5.2 Description of the care setting and environment (hospital care, combination with home care etc.) 1 2 3

5.3 Support services offered which are necessary or at least convenient 1 2 3

5.4 Information about NGOs, self help groups working in the area of the hospital that can offer additional support and information 1 2 3

5.5 Getting familiar with staff and instruments in care and rehabilitation (through pictures and short videos) 1 2 3

5.6 Special centers and experts offered for particular diseases 1 2 3

5.7 Information about funding / financing of special services needed for care and rehabilitation 1 2 3

5.8 Patients' roles and responsibilities in the care process (compliance needed, attitudes supporting the success, motivation issues etc.) 1 2 3

5.9 Others: 1 2 3

Please indicate: _____

6. Besides diagnosis, treatment and care the hospital is a huge organizational structure where a visit needs a lot of **general information about the place and requirements**. Which issues and topics would you like to have information about in this web based tool for patients online?
 (Please select **max. three topics** and mark with (3)the most important, (2)the second important, (1)the third important)

6.1 Address, contact data, main services, departments 1 2 3

6.2 Different language versions offered for general information (e.g. minority languages and English) 1 2 3

6.3 How to reach the place/hospital by different transport means 1 2 3

6.4 Admission requirements (organizational and care requirements) 1 2 3

6.5 Patients' rights and duties 1 2 3

6.6 Special information for migrants and persons with / without refugee or asylum status
 1 2 3

6.7 Quality policy of the hospital 1 2 3

6.8 Map / virtual tour of the hospital 1 2 3

6.9 First aid and emergency information (e.g. information about actual treatment time in emergency care unit based on actual case frequency) 1 2 3

6.10 Others 1 2 3

Please indicate: _____

7. The information portal should beside information about the hospital, treatment etc. also offer a **direct interaction possibility** between patients and the hospital prior to, during and after their hospital visit. Which of the following communication and interaction features would you choose to get into interaction with your local hospital / department?

(Please select **max. three topics** and mark with (3)the most important, (2)the second important, (1)the third important)

7.1 Establishment of a communication office (information about phone number, email address, opening hours etc. of a communication office in the hospital) 1 2 3

7.2 Online (asynchronous) interaction with a medical doctor for medical questions prior to your visit to a hospital 1 2 3

7.3 Possibility to arrange appointments with physicians online 1 2 3

7.4 Information about events and news of the hospital 1 2 3

7.5 Web 2.0 based offers for interaction (blog, facebook site, twitter) 1 2 3

7.6 Others 1 2 3

Please indicate: _____

8. All information regarding the different main topics can be provided in **different formats**. Thinking of an IT based information portal accessible via internet from every computer, which forms of presentation for information would you prefer?

(Please select **max. three topics** and mark with (3)the most important, (2)the second important, (1)the third important)

8.1 Virtual tour through the hospital (through video and 360° viewer tools) 1 2 3

8.2 Text information 1 2 3

8.3 Short videos 1 2 3

8.4 Pictures 1 2 3

8.5 Online lectures in short videos 1 2 3

8.6 Downloadable information in text format (guidelines, information briefings about different topics etc.) 1 2 3

8.7 Games 1 2 3

8.8 Links to external sources (with quality assurance) 1 2 3

8.9 Web 2.0 offers (blogs, facebook site) 1 2 3

8.10 Self tests for symptoms of diseases (where appropriate) 1 2 3

8.11 Others 1 2 3

Please indicate: _____

9. When receiving information about a hospital, diseases, care, diagnosis and treatment of different diseases and health issues, would you trust this information to be true and complete if this is offered by a hospital in your country?

- Totally
- Partially
- Partially not
- Totally not

10. Would you think, that a quality label established by a European consortium of hospital partners and experts about information portals of hospitals would enhance the trustability of such an information portal?

- Totally
- Partially
- Partially not
- Totally not

11. Do you think that information provided about diseases, symptoms and possibly short self tests etc. could replace a visit to a doctor / to the health system?

- Yes
- No (if not: why not): _____

12. Would you prefer to include checks or barriers for **ethical or problematic information** in such a portal (e.g. the question if you want to see pictures and videos showing blood, operations etc.?) or should all information be accessible for everyone without warning?

- I would prefer to have a warning when such content is shown behind
- I think all information should be accessible without any limitation or warnings
- Other:

Please indicate: _____

13. Should the information portal consider some special ethical issues related to discussion of diseases leading to death?

- Yes: – which?: _____
- No

14. Should the portal contain a special section for special target groups such as:

- Migrants
- Disabled
- Children
- Elderly
- Others:

Please indicate: _____

- No

15. Would you personally consider to use such an information and e-learning portal provided by your local hospital?

- Yes – frequently
- Yes – occasionally
- No – never

16. Additional comments and recommendations for the development of an IT based information portal for hospitals:

Thank you very much for your valuable contribution!

The H.E.-L.P. project team

8.2: Questionnaire for medical and health care staff

H.E.-L.P. European Survey

II. Medical and health care staff

The H.E.-L.P. Hospital's E-learning Portal Project is aiming at the development of an online information portal of hospitals for their patients, future patients, their people of kind and friends as well as medical staff to improve their mutual communication, inform about offers and treatment and in general lower the barrier between patient and hospital through better and modern information and communication. The first step for the development of such an information portal and platform is a European wide study of needs and interests of patients, people of kind, friends, medical staff as well as administrative staff from hospitals.

We would like to ask you for your support for our study with answering the following questionnaire. The questions raised are exclusively asking for your personal opinions and preferences, your answers are a valuable contribution to the development to the information portal. All answers will be treated anonymously respecting data protection laws. The results of the European Survey implemented will be available for your convenience soon on the project's website under www.he-lp.eu

We thank you very much for your support!

1.1 To which age category do you belong?

- Under 20 years
- 20-40 years
- 41-60 years
- Over 60 years of age

1.2 Your sex is?

- Male
- Female

1.3 To which professional group of the health system do you belong:

- Medical staff (doctors, physicians etc.)
- Care staff (nurses, care assistants etc.)
- Other care staff (transport service for patients, ambulance service etc.)
- Other Professional support staff: _____
- Administrative Staff in health care (HR responsible, accounting and finance etc.)

1.4 How long is your professional experience in the health care sector?

- 0 – 5 years
- 6 – 10 years
- 11 – 20 years
- 21 – 30 years
- More than 30 years

2. Thinking of an web based information tool offered by a hospital focusing on **prevention of diseases**, which issues and topics would you like to be presented on a web based tool for patients to access online information?

(Please select **max. three topics** and mark with (3)the most important, (2)the second important, (1)the third important)

2.1 Drug misuse (medication) 1 2 3

2.2 Addiction topics (alcohol, nicotine, other drugs) 1 2 3

2.3 Nutrition (healthy nutrition, effects of nutrition on physical fitness, cancer prevention etc.)
 1 2 3

2.4 Stress, depression and mental health issues 1 2 3

2.5 Sexually transmitted diseases 1 2 3

2.6 Contraception 1 2 3

2.7 Healthy lifestyle, physical fitness and activity 1 2 3

2.8 Diabetes 1 2 3

2.9 Maternity issues in general 1 2 3

2.10 Other: 1 2 3

Please indicate: _____

3. The **diagnosis of diseases** is one important offer of hospitals, different methods, instruments and techniques are available in every department and hospital. Considering this, which issues and topics would you like to be presented on a web based tool for patients to access online information?

(Please select **max. three topics** and mark with (3)the most important, (2)the second important, (1)the third important)

3.1 Diagnosis methods offered in the hospital 1 2 3

3.2 Getting familiar with staff, instruments, techniques etc. (e.g. through pictures and short videos) 1 2 3

3.3 Personal consequences (risks) attached to different diagnosis methods 1 2 3

3.4 Results of diagnosis methods and support with interpretation of results (e.g. blood interpretation) 1 2 3

3.5 Time needed and diagnosis process with different methods 1 2 3

3.6 Possible alternatives to different methods offered 1 2 3

3.7 Other: 1 2 3

Please indicate: _____

4. Besides diagnosis the main offer of a hospital is **medical treatment**. Which issues and topics would you like to be presented on a web based tool for patients to access online information regarding offered medical treatment?

(Please select **max. three topics** and mark with (3)the most important, (2)the second important, (1)the third important)

4.1 Main offers of medical treatment 1 2 3

4.2 Getting familiar with staff, instruments, techniques etc. (through pictures and short videos to learn about treatments and care processes offered) 1 2 3

- 4.3 Personal risks attached to different treatment forms 1 2 3
- 4.4 Results of medical treatment (cure, level of cure) 1 2 3
- 4.5 International guidelines for medical treatments followed in the hospital 1 2 3
- 4.6 Price of different treatments (in case of non coverage by insurances) 1 2 3
- 4.7 Alternative methods existing for indicated medical treatment methods 1 2 3
- 4.8 Specialized treatment areas of the particular hospital / department 1 2 3
- 4.9 Offered support services accompanying the medical treatment (psychological support, physiotherapy, speech therapy, occupational therapy, religious services etc.) 1 2 3
- 4.10 Time schedules for medical treatment (how long take the treatment, is it needed to stay at the hospital for the whole time, when is the best time for a certain medical treatment etc.)
 1 2 3
- 4.11 Patients' roles and responsibilities in the treatment process (compliance needed, attitudes supporting the success, motivation issues etc.) 1 2 3
- 4.12 Others: 1 2 3
- Please indicate: _____

5. Diagnosis and medical treatment are accompanied by **care and rehabilitation** offers and services in a hospital. Related to the issue of care and rehabilitation, which issues and topics would you like to be presented on a web based tool for patients to access online information?

(Please select **max. three topics** and mark with (3)the most important, (2)the second important, (1)the third important.

- 5.1 General organization of care in the hospital (approaches, rooms, services offered etc.)
 1 2 3
- 5.2 Description of the care setting and environment (hospital care, combination with home care etc.)
 1 2 3

5.3 Support services offered which are necessary or at least convenient 1 2 3

5.4 Information about NGOs, self help groups working in the area of the hospital that can offer additional support and information 1 2 3

5.5 Getting familiar with staff and instruments involved in care and rehabilitation (through pictures and short videos) 1 2 3

5.6 Special centers and experts offered for particular diseases 1 2 3

5.7 Information about funding / financing of special services needed for care and rehabilitation 1 2 3

5.8 Patients' roles and responsibilities in the care process (compliance needed, attitudes supporting the success, motivation issues etc.) 1 2 3

5.9 Others: 1 2 3

Please indicate: _____

6. Besides diagnosis, treatment and care the hospital is a huge organizational structure where a visit needs a lot of **general information about the place and requirements**. Which issues and topics would you like to be presented on a web based tool for patients to access online information?

(Please select **max. three topics** and mark with (3)the most important, (2)the second important, (1)the third important)

6.1 Address, contact data, main services, departments 1 2 3

6.2 Different language versions offered for general information (e.g. minority languages and English) 1 2 3

6.3 How to reach the place /hospital by different transport means 1 2 3

6.4 Admission requirements (organizational and care requirements) 1 2 3

6.5 Patients' rights and duties 1 2 3

6.6 Special information for migrants and persons with / without refugee or asylum status

1 2 3

6.7 Quality policy of the hospital 1 2 3

6.8 Map / virtual tour of the hospital 1 2 3

6.9 First aid and emergency information (e.g. information about actual treatment time in emergency care unit based on actual case frequency) 1 2 3

6.10 Others 1 2 3

Please indicate: _____

7. The information portal should beside information about the hospital, treatment etc. also offer a **direct interaction possibility** between patients and the hospital prior to, during and after their hospital visit. Which of the following communication and interaction features would you choose to get into interaction with your patients before, during and after the hospital stay?

(Please select **max. three topics** and mark with (3)the most important, (2)the second important, (1)the third important)

7.1 Through a dedicated communication office (providing information about phone number, email address, opening hours etc. of a communication office in the hospital on the portal) 1 2 3

7.2 Online (asynchronous) interaction with patients (e.g. once per week through online consultation and answer of questions) for medical questions prior to your visit to a hospital (settlement privacy issues provided) 1 2 3

7.3 Possibility to arrange appointments with physicians online 1 2 3

7.4 Provision of information about events and news of the hospital 1 2 3

7.5 Web 2.0 based offers for interaction (blog, facebook site, twitter) 1 2 3

7.6 Others 1 2 3

Please indicate: _____

8. If information regarding the different main topics can be provided in **different formats**. Thinking of an IT based information portal accessible via internet from every computer, which forms of presentation for information would you prefer from the perspective of the hospital?

(Please select **max. three topics** and mark with (3)the most important, (2)the second important, (1)the third important)

- 8.1 Virtual tour through the hospital (through video and 360° viewer tools) 1 2 3
- 8.2 Text information 1 2 3
- 8.3 Short videos 1 2 3
- 8.4 Pictures 1 2 3
- 8.5 Online lectures in short videos 1 2 3
- 8.6 Downloadable information in text format (guidelines, information briefings about different topics etc.) 1 2 3
- 8.7 Games 1 2 3
- 8.8 Links to external sources (with quality assurance) 1 2 3
- 8.9 Web 2.0 offers (blogs, facebook site) 1 2 3
- 8.10 Self tests for symptoms of diseases (where appropriate) 1 2 3
- 8.11 Others 1 2 3

Please indicate: _____

9. Which **main benefits** could you imagine from such an information portal for the hospital and / or staff of the hospital:

- More prestige of the particular hospital offering such a portal:

yes partially no

- Better service quality for the hospital for its patients: yes / partially / n
 yes partially no
- Economical benefits (e.g. reduction of time spent): yes / partially / no
 yes partially no
- Reduction of patients with questions that could be answered online: yes / partially / no
 yes partially no
- Others:
Please indicate: _____

10. Do you think that such an information portal and especially connected interaction facilities including Web 2.0 tools like facebook could lead to unexpected and **non desirable consequences** for the hospital and / or staff (e.g. online bullying, public pressure, etc.).

Yes

If Yes: which and how?

No

11. Which **general problems** and risks do you see within such an information portal in relation to the following issues:

Languages:

Legal issues:

Organisational issues:

Others:

12. Additional comments and recommendations for the development of an IT based information portal for hospitals:

Thank you very much for your valuable contributions!

The H.E.-L.P. Project Team!

8.3: Website Analysis Grid



Website Analysis Grid

Name-----

Date ----- Time.....

Country-----

Age

1.-What type of connection do you have to the Internet ?

Dial-up connection

Direct connection DSL, -----

Broadband / cable.....

Other.....

2.- What is the URL of the Web page your are evaluating ? _____

3.-What is the name of the site ?

Part 1: Design and usage of the page

As you look at the questions below, put an X in the yes or no column for each question

1. Does the page take a long time to load? Yes No
If yes, how much time
2. Does the page allow you to understand what it is and which organization it belongs to easily? Yes No
3. Are the pictures on the page helpful to understand the content of the page? Yes No
4. Is each sector of the page labeled with a heading? Yes No
5. Did the responsible of the page sign his/her real name? Yes No
6. Do you have contact information available, such as an e-mail address? Yes No
7. Is there a date on the page that tells you when it was the last updated? Yes No
8. Can you access common questions and answers quickly? Yes No
9. If you go to another page on the site, can you get back to the main page with one click? Yes No
10. If you go to another page on the site, is the navigation structure and the appearance of the website maintained (colors, fonts, logos)? Yes No
11. Do images and visible graphics help you navigate the website (ie do they provide clues to how to move from page to page)? Yes No
12. Do you think the page helped you find quickly and easily the information you searched? Yes No



Free text comments

Using the data you have collected above, write a paragraph explaining which functions from this page you will recommend to use in the HELP portal

Please indicate your preferences using a scale 1 to 3 indicating your first, second and third preferred alternative/solution

Part 2 : Website content

1. Do pages have visible titles? Yes No
2. Does the title of a page tell you what the page is about? Yes No
3. Does the page make it clear who the main target group is? Yes No
4. Does the website contain important information about the organization? Yes No
5. Does the website contain information about the different levels of the organization e.g. clinics, laboratory, healthcare centers, specialists,? Yes No
6. Can you tell if the information on the website is up-to-date ? Yes No
7. Does the page highlight important, time-specific news, for example. in case of vaccinations, epidemics etc ? Yes No
8. Does the page provide links to other information sources (for example links to other healthcare services, social security insurance, public health policies)? Yes No
9. Does the page provide information about the number of patients waiting for an appointment, surgery or any other treatment? Yes No
10. Does the page allow to book appointments, surgeries or any other treatment? Yes No
11. Does the page allows you to send comments (for example by providing an email address or a form) to the editor responsible for the page to:
 - Improve the page Yes No
 - Correct wrong or misleading pieces of information Yes No
 - Report generic problems or errors with the page Yes No
12. Does information on the page contradict information you found elsewhere? Yes No
13. Does the page use superlatives to present the organization: for example the best, the most important, etc Yes No



- 14 Does the page contain information about rules, payments, procedures that are important for the patients? Yes No
- 15 Does the page contain information that might be of interest to persons seeking employment such as available jobs, openings, etc Yes No
- 16 Does the page offer forms for requesting appointments or treatments for patient or future patients to download? Yes No
- 17 Does the page contain examples of forms to be filled in different situations? Yes No

Free text comments

Using the data you have collected above, write a paragraph explaining which functions from this page you will recommend to use in the HELP portal

Please indicate your preferences using a scale 1 to 3 indicating your first, second and third preferred alternative/solution

Part 3 : Accessibility to services

1. Is the website accessible :

- a. Web browser Yes No Did not test
- b. Mobil phone Yes No Did not test
- c. iPad Yes No Did not test
- d. other (_____) Yes No Did not test

If no, can you provide a short description of the issue: _____

2. Does the page require registration and a password to access classified information e.g. information about treatments, prevention programs etc ? Yes No

3. Is the page available in different languages? Yes No

4. If yes, how many languages in addition to the native language? _____

5. If yes, is your language one of these languages? Yes No

6. Does the website offer a blog, blog-like news, or any other constantly updated informational channel? Yes No

7. Does the website contain a list of frequently asked questions (FAQ)? Yes No

8. Does the website offer information and advice from different practitioners? Yes No

Nurses, physicians, Yes No

9. Does the website offer educational or informational videos to the patients? Yes No

10. Does the website contain information about social communities or patients association name of the community/association, contact person, telephone number etc Yes No

11. Does the website offer information about :

- a. Internal guide through the institution Yes No
- b. maps and walk-in guides Yes No
- c. Information about access to health system in different languages Yes No
- d. Information about utilities (patients rules, payment) Yes No
- e. Statistical information about patients treated per year Yes No



- f. Outcomes Yes No
- g. Available jobs Yes No

Measuring time to learn, speed of performance, rate of errors by users, retention over time and subjective satisfaction

Search information about how to prepare for a surgery!

Time to learn :

How long does it take to learn how to search and find relevant information ?min

Speed of performance:

How long does it take to carry out the benchmark task ?min

Rate or errors by users

How many and what kinds of errors you did before carrying out the benchmark task?min

How well do users maintain their knowledge about how to search after an hour

- 1 2 3 4 5 6 7

Subjective satisfaction

How much did you like using various aspects of the interface?

1 2 3 4 5 6 7

Give example of the interfaces you liked

1.-

2.-

3.-

Was it a satisfactory and enjoyable experience

1 2 3 4 5 6 7

Provide a brief motivation:

How much did you like the following items:

The colors

1 2 3 4 5 6 7

Icons

1 2 3 4 5 6 7

Buttons

1 2 3 4 5 6 7

Numeric and formats

1 2 3 4 5 6 7



Weights and measures

1 2 3 4 5 6 7

Grammar and spelling

1 2 3 4 5 6 7

Choice of language

1 2 3 4 5 6 7

Choice of fonts

1 2 3 4 5 6 7

Audio

1 2 3 4 5 6 7

Video and films

1 2 3 4 5 6 7

Free text

Using the data you have collected above, write a paragraph explaining which functions from this page you will recommend to use in the HELP portal

Please indicate your preferences using a scale 1 to 3 indicating your first, second and third preferred alternative/solution

Do you want to add some specific comment or recommendation?

9. H.E.L.P. project, citizen interviews

Questions, answers from the participant countries and short comments.

9.1.1. 1.1 To which age category do you belong?

	under 20 years	20-40 years	41-60 years	over 60 years	sum
Turkey	5	12	13	0	30
Italy (asur marche)	0	9	9	2	20
Finland	4	8	3	5	20
Greece (nsph/gr)	1	13	6	0	20
Austria	1	7	6	6	20
Italy (AOR)	1	10	7	1	20
Sweden	1	6	1	0	8
sum	13	65	45	14	

Each country was supposed to interview 20 people but Sweden only interviewed 8 and Italy interviewed a total of 38. Hence, we should not compare the countries' totals.

9.1.2. 1.2 Your sex is?

	Male	Female
Turkey	13	17
Italy	7	13
Finland	9	11
Greece	4	16
Austria	7	13
Italy	9	10
Sweden	3	5
sum	52	85

Mostly females.

9.1.3. 1.3 Highest finished education

	primary school	lower 2ndary	upper 2ndary	vocational.	university
Turkey	6	5	3	9	7
Italy	4	6	2	4	6
Finland	2	4	2	7	5
Greece	0	0	3	1	16
Austria	2	4	3	5	6
Italy	0	5	1	8	5
Sweden	0	0	3	0	5
sum	14	24	17	34	50

Mainly higher education, especially in Greece and Sweden.

9.1.4. 2. What topics on prevention of diseases would you like to be presented?

	drug mis- use	addic- tion topics	nutri- tion	stress & men- tal health	STD: s	con- tra- cep- tion	health y life- style	diabe- tes	mater- nity is- sues	other
Turkey	47	21	45	28	5	7	19	7	1	0
Italy	18	19	20	17	14	5	17	6	6	0
Finland	10	14	12	19	7	1	29	25	3	0
Greece	14	22	8	38	17	2	8	7	3	1 heart disease preven- tion
Austria	9	5	34	18	2	0	38	14	1	0
Italy	11	15	23	16	17	6	20	0	3	3 backache
Swe- den	4	6	13	9	5	2	6	1	2	0
sum	113	102	155	145	67	23	137	60	19	4

Nutrition is in top, although not preferred by more than three.

Stress is ranked highest in Greece and second highest overall.

Finland and Austria prefer lifestyle.

Information on drugs is ranked very highly in Turkey and partly in Italy but not anywhere else. This corresponds with the Staff results.

9.1.5. 3. What topics on diagnosis of diseases would you like (...)?

	methods offered	getting familiar with staff etc	personal risks	results and interpretation	time needed	alternative methods	others
Turkey	27	35	42	31	30	15	0
Italy	38	18	15	22	7	20	0
Finland	11	10	21	23	33	24	0
Greece	36	16	14	31	9	14	0
Austria	48	34	9	11	7	10	0
Italy	33	9	28	23	6	15	0
Sweden	7	5	13	7	10	6	0
sum	200	127	142	148	102	104	0

Methods tops.

Results is the second top, not favoured by anyone.

Risks come in third, top ranked by Turkey and Sweden.

9.1.6. 4. What topics on medical treatment would you like (...)?

	main offers	getting familiar w/ staff	personal risks	guide-lines followed	price	alternative methods	specialised areas	other support services	time schedules	patients' roles	oth.
Turkey	15	19	37	28	11	13	7	9	20	21	0
Italy	25	10	23	8	13	12	8	8	8	5	0
Finland	14	0	31	16	19	1	12	8	18	2	0
Greece	23	7	18	6	15	9	6	23	4	9	0
Austria	37	31	9	4	0	14	16	4	3	1	0
Italy	33	4	32	5	7	7	4	8	3	12	0

Sweden	13	2	6	1	4	2	5	2	7	5	0
sum	160	73	156	68	69	58	58	62	63	55	0

Main offers and risks are almost equally preferred.

Other support services are higher ranked among Greeks than others.

9.1.7. 5. What topics on care and rehabilitation would you like (...)?

	general organization	the care environment	support services offered	NGOs	getting familiar w/ staff	experts offered	funding	patients' roles	oth.
Turkey	34	32	23	9	17	29	14	22	0
Italy	22	22	1	19	15	21	14	6	0
Finland	28	6	14	12	3	27	16	14	0
Greece	13	30	20	10	14	15	8	9	0
Austria	18	21	14	9	34	17	0	6	0
Italy	9	12	12	19	4	31	16	11	0
Sweden	8	8	9	0	5	6	0	11	0
sum	132	131	93	78	92	146	68	79	0

Experts, Organization and Care are ranked highest among most countries.

Austria prefer Staff.

Sweden's points are fairly evenly distributed among all but NGO:s and Funding.

9.1.8. 6. What topics on general information would you like (...)?

	address, contact data etc	different language versions	how to reach the place	admission requirements	patients' rights	info for migrants	quality policy	map of hospital	first aid info	other
Turkey	46	12	27	15	13	7	26	9	25	0
Italy	34	13	9	9	23	6	6	8	12	0
Finland	27	8	18	1	20	4	33	3	7	0
Greece	26	14	11	10	17	13	8	8	13	0

Austria	41	8	22	7	18	0	7	8	8	0	
Italy	27	14	8	11	10	8	9	2	22	3	Ethyc
Sweden	17	12	1	2	2	2	0	7	5	0	
sum	218	81	96	55	103	40	89	45	92	3	

Address ranked absolutely highest.

Quality preferred among Finns.

9.1.9. 7. What interaction possibilities would you like (...)?

	dedicated communi- cation office	online interac- tion w/ patients	arrange ap- point-ments online	info about events and news	web 2.0	other	
Turkey	27	67	46	26	14	0	
Italy	38	32	21	17	12	0	
Finland	37	26	22	29	6	0	
Greece	27	42	39	4	5	2	"Average waiting list - time to be spent (estima- tion)"
Austria	31	27	26	23	8	0	
Italy	31	28	34	11	7	0	
Swe- den	18	17	11	1	1	0	
sum	209	239	199	111	53	2	

The three first are the most popular, especially for Sweden.

9.1.10.8. What information formats would you like?

	virtual tour	text info	short videos	pictures	online lectures	downloadable info	games	external links	web 2.0	self tests	oth
Turkey	10	27	28	15	30	21	3	2	6	38	0
Italy	23	17	8	7	20	9	1	12	6	17	0
Finland	16	36	12	17	3	13	2	4	9	11	0
Greece	10	13	20	14	12	20	3	9	2	17	0
Austria	26	11	43	20	7	3	5	1	0	4	0
Italy	15	24	9	3	17	17	3	6	7	7	0
Sweden	2	14	0	6	2	12	0	5	0	7	0
sum	102	142	120	82	91	95	17	39	30	101	0

Text information ranked highest and preferred by Finland, Italy and Sweden.

Turkey prefers tests.

9.1.11.9. Would you trust the information?

	Totally	Partially	Partially not	Totally not
Turkey	22	8	0	0
Italy	5	13	0	2
Finland	6	12	3	0
Greece	7	13	0	0
Austria	6	12	2	0
Italy	11	6	1	1
Sweden	4	4	0	0
sum	61	68	6	3

Everybody generally positive.

9.1.12.10. Would you prefer an European quality label?

	Totally	Partially	Partially not	Totally not
Turkey	10	10	0	10

Italy	8	8	1	3
Finland	11	6	2	0
Greece	12	8	0	0
Austria	4	14	2	0
Italy	10	8	0	1
Sweden	1	1	4	2
sum	56	55	9	16

Most countries positive, Sweden and partly Turkey being notable exceptions.

II. Could the portal replace a visit to a doctor?

	Yes	No	
Turkey	10	20	9 "Don't make a physical examination" 7 "Fallible" 4 "Unreliable"
Italy	11	9	8 "It is important physical examination" 1 "impossible"
Finland	17	3	
Greece	3	17	5 "Only partially" 11 "It is not sufficient. Physical contact with doctor is necessary." results."
Austria	7	13	1 "Possibility for misinformation" 1 "Cant be trusted online"
Italy	2	16	1 "It may not be truthfully" 2 "The physician assessment it is necessary" 9 "Direct contact is necessary" 5 "Patients have no necessary competencies"
Sweden	5	3	"The text format is limited and some questions will never be asked. Information will be left out. A web page cannot replace a human brain." "Internet provides one-way communication. Reading about disease makes peo-

			ple worry, why a dialogue with a physician is always preferred."
			"A checklist or self-test does not cover everything. A physician understands what the patient is trying to express, regardless of the exact wording."
sum	55	81	

Mostly negatives.

(Differences between countries suggest different interpretations of the question.)

9.1.13. 12. Would you prefer a barrier for ethical or problematic information?

	prefer warning	no warning	other	
Turkey	12	18		
Italy	15	5	0	
Finland	8	12	0	
Greece	11	8	1	"There should be no such information."
Austria	13	7	0	
Italy	15	4	0	
Sweden	6	0	2	"Perhaps if an image is extremely disturbing. Otherwise not, as long as the visitor actively has been looking for that particular information. There should be no strong images on the front page."
	80	54	3	

Most countries prefer a warning or are more or less neutral

9.1.14. (13. Should the portal consider ethical issues related to diseases leading to death?)

Question left out.

9.1.15. 14. Should the portal contain a special sections for groups such as:

	migrants	disabled	children	elderly	others	
Turkey	0	20	8	2	0	
Italy	6	8	14	11	2	"workers" "everyone"
Finland	3	4	1	6	0	
Greece	19	13	12	10	2	"HIV positive" "For deprived people information on special prices or alternative treatments that do not cost a lot."
Austria	11	2	5	13	0	
Italy	9	12	9	13	4	2 "no" 2 "Women health"
Sweden	2	1	3	4		"Mother and baby" "Men and women"
	50	60	52	59	8	

All alternatives are equally voted for.

9.1.16. 15. Would you personally use an e-learning portal?

	frequently	occasionally	never
Turkey	20	10	0
Italy	16	13	1
Finland	4	16	0
Greece	12	8	0
Austria	4	15	1
Italy	8	11	0
Sweden	1	7	0
	65	80	2

Most people positive.

9.1.17. 16. Additional comments

Turkey: -

Italy: “the portal should inform all people about their duties”

Finland: -

Greece: "In some questions more than three topics can be checked."

"The designer should think as a potential patient and define the needs of general population with limited knowledge on medical issues. The language used must be simple, avoid medical terminology and offer explanations where needed."

"Hopefully this will be implemented soon in Greek hospitals."

"If possible to have contact with the same medical staff in the asynchronous discussion."

"It must include information regarding various simple everyday diseases as well as mental health issues and diseases related to the way of life taking into account the different cultures and religions."

"It should provide information regarding various diseases that are more frequent (such as colds) so that we could have less visits to hospitals for diseases that can be treated at home and the patient can know some basic thing about symptoms and signs. So he can recognise the problem and when he goes to the hospital he can go directly to the special doctor."

Italy: “web site should be walk-thorough”

“2 web usability”

“web usability and good search function”

“Transparency in booking, scheduling, places and admission requirements”

Sweden:

- There are many different websites out there. A joint effort, one single, reliable site with information on symptoms and disease is preferable.
- Wants the information from the local county council. There should be a “regional feeling”.
- Would like links to further reading, perhaps articles in scientific journals.



- Health care staff of different levels should be involved in the design process. The sender of the information can not be the IT department.
- Site must be frequently updated.
- Wants a wide range of content.
- Clear and precise information.
- Promotion of the site is important, people need to be aware of it.
- Association with the government ensures quality.
- Text message (SMS) services are nice, e.g. reminders.

10. H.E.L.P. project, staff interviews

Questions, answers from the participant countries and short comments.

10.1.1. 1.1 To which age category do you belong?

	under 20 years	20-40 years	41-60 years	over 60 years	Sum
Turkey	0	22	8	0	30
Italy (asur marche)	0	10	9	1	20
Finland	0	11	9	0	20
Greece (nsph/gr)	0	3	17	0	20
Austria	0	9	6	0	15
Italy (AOR)	1	6	11	0	18
Sweden	0	1	6	1	8
sum	1	62	66	2	

Each country was supposed to interview 20 people but Sweden only interviewed 8 and Italy interviewed a total of 38. Hence, we should not compare the countries' totals.

10.1.2. 1.2 Your sex is?

	Male	Female
Turkey	8	21
Italy	4	16
Finland	4	16
Greece	17	3
Austria	7	8
Italy	6	12
Sweden	5	3
sum	51	82

Most interviewees are female. Greece is the only country to mainly interview males.

10.1.3. I.3 To which professional group of the health system do you belong?

	medical staff	care staff	other care staff	other professional support staff	administrative staff
Turkey	1	17	0	4	8
Italy	5	9	1	1	4
Finland	4	13	3	0	0
Greece	18	0	0	2	0
Austria	9	2	1	0	3
Italy	2	4	2	1	9
Sweden	3	4	0	1	1
sum	42	49	7	9	25

Mostly nurses and physicians.

10.1.4. I.4 How long is your professional experience in the health care sector?

	0-5 years	6-10 years	11-20 years	21-30 years	over 30 years
Turkey	7	9	6	7	1
Italy	5	4	6	3	2
Finland	0	9	6	5	0
Greece	1	2	12	5	0
Austria	4	5	3	3	0
Italy	4	5	3	3	3
Sweden	0	0	2	3	3
sum	21	34	38	29	9

Fairly evenly distributes in all countries except Finland, Greece and Sweden where next to no interviewees had less than 6 years of experience and most over 10.

10.1.5. 2. What topics on prevention of diseases would you like to be presented?

	drug mis-use	addic-tion topics	nutri-tion	stress & mental health	STD:s	con-tra-cep-tion	health y life-style	diabetes	mater-nity issues	other
Turkey	45	15	37	26	6	10	28	6	7	0

Italy	12	18	19	26	15	3	15	3	6	3	“social support networks”
Finland	3	3	5	11	6	0	7	6	1	0	
Greece	8	16	38	24	3	1	17	12	0	1	
Austria	2	8	24	20	6	6	12	7	5	0	
Italy	9	13	24	25	11	1	16	3	4	2	“Work related diseases”
Sweden	3	2	6	11	6	0	7	5	5	3	Labeling by diagnosis.
sum	82	75	153	143	53	21	102	42	28	9	

*Stress is rated highest by Italy*2, Finland and Sweden and second highest by Greece and Austria.*

Nutrition by Greece and Austria.

Drug misuse is top rated by Turkey, fairly low by the others.

Lifestyle is rated rather high all over.

10.1.6.3. What topics on diagnosis of diseases would you like (...)?

	methods offered	getting familiar with staff etc	personal risks	results and interpretation	time needed	alternative methods	others
Turkey	54	32	39	26	9	20	
Italy	40	21	20	19	13	7	0
Finland	11	24	30	14	39	3	0
Greece	38	32	9	19	8	11	3
Austria	28	15	16	8	11	11	0
Italy	28	9	23	26	11	11	0
Sweden	15	6	14	2	4	7	0
sum	214	139	151	114	95	70	3

Methods is top choice for all countries except Finland, who are the only ones to prefer time, lowly ranked by the others.

Risks fairly popular everywhere except Greece.

10.1.7. 4. What topics on medical treatment would you like (...)?

	main offers	getting familiar w/ staff	personal risks	results	guide-lines followed	price	altern-ative methods	special-ized areas	other support services	time schedules	patients' roles	oth.
Turk.	35	21	25	21	27	8	13	11	7	7	6	
Italy	30	14	18	13	12	5	2	6	14	6	2	
Finl.	3	4	6	18	10	17	0	8	5	22	26	
Gree.	30	8	3	21	15	3	1	14	11	2	11	1
Aust.	22	8	4	1	6	3	9	14	5	6	11	0
Italy	22	5	19	15	10	10	5	9	1	6	5	0
Swe.	18	4	9	8	0	2	6	0	0	0	1	0
sum	160	64	84	97	80	48	36	62	43	49	62	1

Main preferred by all except Finland..

Results fairly popular everywhere except Austria.

10.1.8.5. What topics on care and rehabilitation would you like (...)?

	general organization	the care environment	support services offered	NGOs	getting familiar w/ staff	experts offered	fund- ing	pa- tients' roles	other
Turkey	44	34	14	7	26	10	13	26	0
Italy	29	25	18	10	4	21	8	2	3 "approximate outcomes of the treatment"
Finland	0	1	2	0	0	3	0	0	0
Greece	28	21	14	6	17	23	3	7	1
Austria	22	16	2	15	10	9	7	9	0
Italy	18	14	9	16	5	36	6	4	0
Sweden	8	9	3	7	3	10	1	4	3 "Follow-up services."
sum	149	120	62	61	65	112	17	24	4

General organization highly ranked by all except Finland. (On other hand, Finland has not many answers to this question.)

10.1.9.6. What topics on general information would you like (...)?

	ad- dress, con- tact data etc	differ- ent lan- guage versions	how to reach the place	admis- sion require- ments	pa- tients' rights	info for mi- grants	qual- ity policy	map of hospital	first aid info	other
Turkey	65	16	31	17	17	1	13	6	12	0
Italy	34	10	9	11	17	7	3	7	19	3 "deaf inter- pre- ter"
Finland	2	16	4	6	27	7	20	2	25	0

Greece	37	11	18	12	5	3	9	7	18	0	
Austria	22	9	5	7	18	2	3	18	6	0	
Italy	26	7	11	6	8	4	7	12	25	0	
Sweden	21	6	8	6	1	0	4	0	2	0	
sum	207	75	86	65	93	24	59	52	107	3	

Address most popular.

Second highest, First aid, ranked highly by Finland and Italy.

10.1.10. 7. What interaction possibilities would you like (...)?

	dedicated communication office	online interaction w/ patients	arrange appointments online	info about events and news	web 2.0	other	
Turkey	65	40	26	36	13	0	
Italy	45	39	25	9	1	1	"develop how to access to health facilities"
Finland	32	18	29	12	26	0	
Greece	36	32	36	10	4	1	
Austria	25	15	18	18	10	0	
Italy	16	39	39	10	4	0	
Sweden	13	15	13	1	0	1	"SMS reminder"
sum	232	198	186	96	58	3	

Web 2.0 ranked low by most, with Finland as a notable exception.

Three first preferred on the whole.

10.1.11. 8. What information formats would you like?

	virtual tour	text info	short videos	pictures	online lectures	downloadable info	games	external links	web 2.0	self tests	oth
Turkey	34	36	28	4	19	19	5	6	11	18	0
Italy	30	20	10	2	14	29	3	4	2	6	0
Finland	13	19	4	22	1	11	0	3	29	18	0
Greece	32	10	23	11	12	22	3	1	2	4	0
Austria	20	7	2	15	4	3	0	2	1	13	0
Italy	23	6	6	2	23	34	0	2	4	5	0
Sweden	6	13	5	2	5	4	0	4	0	9	0
sum	158	111	78	58	78	122	11	22	49	73	0

Web 2.0 ranked low by most, with Finland as a notable exception.

Tour, text and downloadable information preferred on the whole.

10.1.12. 9. What main benefits of the tool do you imagine?

	more prestige			better service quality			economical benefits			reduction of patients			other
	yes	partly	no	yes	partly	no	yes	partly	no	yes	partly	no	
Turkey	25	5	0	22	7	1	19	5	6	3	10	17	
Italy	10	8	2	19	1	0	12	6	2	10	8	2	1
Finland	9	11	0	10	9	1	2	8	10	5	9	5	0
Greece	14	4	2	14	4	2	13	5	2	13	3	4	0
Austria	9	5	1	11	2	2	3	6	6	2	5	8	0
Italy	8	6	1	17	1	0	3	9	3	7	8	0	1
Sweden	4	1	3	8	0	0	7	1	0	7	0	1	
sum	79	40	9	101	24	6	59	40	29	47	43	37	2

Comments:

Italy: "more clearly and speed"

Italy: "patient clinical folder"

Sweden: "Promotion." "Better use of resources." "Increasing accessibility lowers risk of severe illness."

Mainly optimistic as to questions of prestige and service quality.

Finland does not believe in economical benefits.

Turkey and Austria does not believe in reduction of patients.

10.1.13. 10. Do you think the portal could lead to non desirable consequences?

	Yes	how	No
Turkey	17	<p>4 "ethical issues"</p> <p>4 "legal issues"</p> <p>2 "misuse information"</p> <p>1 "online bullying"</p> <p>4 "public pressure"</p> <p>2 "use the information maliciously"</p>	13
Italy	4	<p>1 "difficult to filter the information with corruption"</p> <p>1 "abuse of services by hypochondriacs"</p>	16
Finland	5	<p>2 "safety"</p> <p>2 "lost private life"</p> <p>1 "fear"</p>	14
Greece	4	<p>1 "You can't control who posts what kind of information which can be dangerous and upsetting."</p> <p>1 "It depends. I think that this kind of interaction facilities described in all these questions needs someone who will be very careful in organising (legal, ethical, organisational and other issues) in order to avoid unexpected and non desirable consequences."</p> <p>1 "Because in facebook anyone can write everything he wants without critique based on his experience and that can be misleading."</p>	16
Austria	7	<p>1 "privacy issues, identification problems in web 2.0"</p> <p>1 "problems with internet access for people"</p> <p>1 "exclusion of elderly because of access problems "</p> <p>1 "legal issues"</p> <p>1 "more work, too extensive information wishes, forensic issues"</p>	7
Italy	2	1 "None"	16

		1 "Extern pressure"	
Sweden	5	<p>1 "Open forums always provide opportunities to vent when one is not satisfied. Usually, the negatives are emphasised. This is already happening and will increase if things are connected to Facebook etc."</p> <p>1 "In the case of a medical error, groups might form, bad-mouthing the institution. Negative feedback is stressed over positive. Failures will be highlighted, not successful treatments."</p> <p>1 "A person might be named and shamed for a medical opinion."</p> <p>1 "Increasing knowledge creates worry."</p> <p>1 "Health care is supposed to be serious and professional, not mixed up with social media such as Facebook."</p> <p>1 "Risk of threats from dissatisfied caretakers."</p>	3
sum	44		85

About a third of the interviewees are afraid of negative consequences.

Turkey is the only country with predominantly negative interviewees.

10.1.14. II. Which general problems and risks do you see in relation to:

	languages	legal issues	organizational issues	others
Turkey	2	9	2	0
Italy	10	6	9	0
Finland	"expensive to translate and which languages?" "languages?"	2 "data security" 1 "security" 1 "staff security" 1 "how to organise login that it is safety"	1 "organising the material" 1 "lots of material" 1 "updating"	
Greece	1 "Only positive for migrants." "Both local and foreign languages should be used." "I believe that all information should be given in the national language of the country and probably a second or third language based in the number of foreign patients that use the hospital services will be useful in this portal." "Local language and English should be included. Probable problem with minorities' language." "English language should be included." "If they use medi-	1 "Many, e.g. how can the posted information be trustworthy if for example hackers post irrelevant things" "Safety of patients data." "Portal is only for information, it doesn't substitute the role of the physician" "I think that legal issues are more important. One must be very careful about legal issues in connection with medical, ethical, economical and political issues. It is also important to take in consideration the culture of people." "There is a risk of shocking videos showing operational procedures."	2 "Staff is not prepared to use this IT on regular basis (hospitals are not well organised to give time to health professionals to get familiar with IT" "The portal should always be renovated and updated. This is a crucial point for the success of the portal and its reliability." "No organisational issues provided that a "correct" website is formed." "Maintaining, protecting and keeping the portal up-to-date."	0 "Some doctors will benefit by presenting themselves while others with more skills (possibly) could be absent from the portal due to reasons beyond their control." "The portal should have simple interface, short and clear videos, simple medical terms and a large number of pictures." "Some may believe that they are ill because they have read about some symptoms and they could be

		cal terms it would be difficult for one to understand."		"No legal issues."			in confusion without reason."
Austria	1	"costs for translation"	1	"Legal issues" "diagnose patients without seeing them is a legal problem" "forensic issues"		"changes of the hospitals' workflow needed when establishing such a system" "actualisation, more work"	"less questions from patients staying in the hospital for a short time"
Italy	3		7		9		0
Sweden		Information can be misinterpreted by non-professionals. This is easier to avoid in person. (3) Information can be misinterpreted by non-native speakers. (2) Misinterpretations can lead to a lawsuit. (1) The information must be available in many different languages. (2)		Important to consider the Medical Record Laws. What is to be recorded? When does written text become a medical record? Everything can not be put in writing. (2) Does an online consultation count as a real medical consultation that must be recorded? (1) Difficult to judge a medical condition over the telephone or Internet. Whose is the responsible? (2) Confidentiality is important. The IT systems must be safe. Authorization is important for personal information. (2) Incorrect information can lead to a lawsuit. (2)		The site must be maintained by medical experts. (4) A remuneration model for aforementioned work must be developed. Today, there is none. (2) It might prove difficult to recruit medical staff to this kind of work. (1)	It is vital to keep the portal up-to-date. (3) The more information, the greater the risk for misinterpretation. (1) In the case of online psychiatry, the patient's motivation is essential. (1)

	5		9		9		0	
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10.1.15. 12. Additional comments

Turkey: -

Italy: "more information", "disseminate information service", "real knowledge of the services offered", "deaf interpreter"

Finland: -

Greece: "Some basic information concerning diagnosis and treatment could be very helpful. At this stage interactive approaches in many hospitals are almost impossible." "Please beware of viruses." "Hospitals should have the opportunity to give to people the chance to access the hospital in a secure manner in order to require a visit to a doctor, repeat prescriptions etc." "Website should be organised in a fluent and easy to understand way so that patients of all educational levels can comprehend." "Website should be organised in a way so that it can be easily understood and used by the patients of all levels." "Must be intuitive and free of jargon."

Italy: "Awareness about patient needs" "Web site should become a reference point for health (www.webmd.com)" "Easy to use" "Web site should be useful for get money from stakeholders (advertisements maintaining a public high profile - super partes -)" "Web site should let available educational videos concerning congresses and seminars realised in the hospital"

Sweden:

- Links to crisis hotlines etc. are important.
- The system and functions must be easy and fast to use. No double logins. One should be able to do a quick errand in five minutes, thus utilising the point of the portal.
- As much information as possible.
- A guide such as the Microsoft Clip helps navigating the portal.
- Modern design and state-of-the-art technology are important.
- What works in somatic health care might not work in psychiatry. A simple feature such as booking appointments online is not desirable in psychiatry where patients are particularly ill-equipped to judge their own condition.
- Web-based services are good for simple tasks that do not require much communication. E-mailing back and forth is a waste of time compared to simply call the patient on the phone and neither

compares to a meeting in person. The portal must not encourage too many online questions. Limited availability is not necessarily a bad thing.

- Important to consider what is suitable for local vs. regional level.
- Diagnostic methods is not an issue for the patients. The physician decides when an MRI is appropriate and when it is not.

11.Disclaimer



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