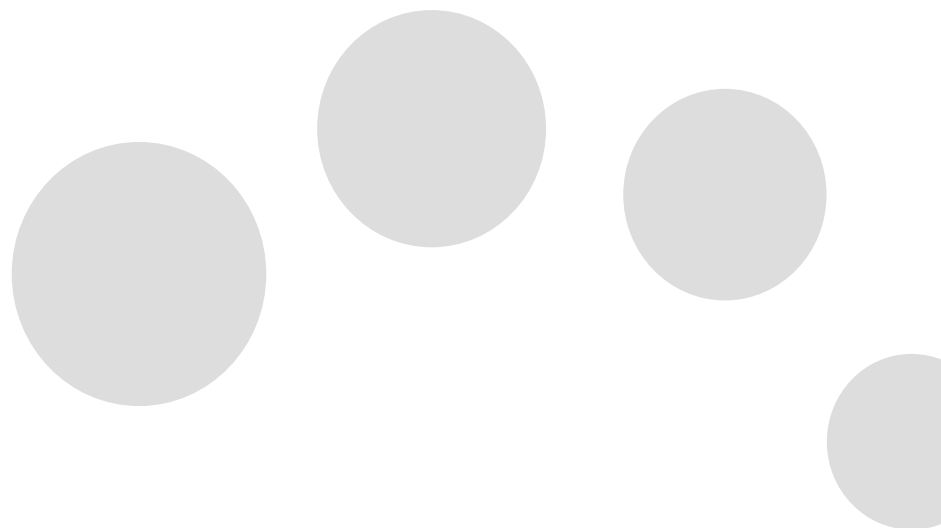


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# **Project "eHealth for Regions": Results and Perspectives**





## Content

Introduction.....	2
<b>1. Health care structures and needs for eHealth in the Baltic Sea region .....</b>	<b>2</b>
1.1. Comparing the health care structures.....	2
1.2. Regional need analysis „eHealth acceptance and awareness” .....	4
1.3. Report "eHealth as a facilitator of transnational co-operation on health" .....	7
<b>2. Strategy .....</b>	<b>8</b>
2.1. European perspectives .....	8
2.2. Strategic goals of "eHealth for Regions" .....	8
2.3. A network for innovation in transnational co-operation .....	9
2.4. Political Strategic Board (PSB) .....	10
2.5. Organisation model.....	11
<b>3. Co-operation fields and pilots .....</b>	<b>12</b>
3.1. eCardiology .....	12
3.2. eRadiology.....	12
3.3. Exchange of patient information .....	13
3.4. Geographic Information System (GIS).....	14
3.5. Supporting the implementation of a web-based electronic health record... ..	14
3.6. Ferries with Tele ECG at the Baltic Sea .....	15
3.7. Common eHealth conference .....	15
Contacts .....	16

## Introduction

The project partners summarise here the results which were achieved so far within the "eHealth for Regions" project. Furthermore future perspectives of the international network are highlighted.

First the project members started to analyse the different health care structures in the partner countries. They carried out a survey in five countries asking the public, doctors and nurses as well as decision makers in the health care sector for regional needs and acceptance of eHealth. The purpose of the report "eHealth as a facilitator of transnational co-operation on health" is to reflect ideas and experiences on how eHealth can facilitate and be the necessary tool for transnational co-operation on health.



Secondly the project partners developed a common strategy for the "eHealth for regions" network in the framework of European policy objectives. The international partners agreed on an organisation model for the sustainable network after the project phase. Substantial part of this model is a Political Strategic Board set up with representatives of the highest political level from the regions.

Thirdly the project members agreed on concrete co-operation fields. The partners already co-operate within the "eHealth for Regions" network in these fields.

### 1. Health care structures and needs for eHealth in the Baltic Sea region

#### 1.1. Comparing the health care structures

At the beginning of the project the partners carried out a comparative analysis of health care structures and eHealth activities in their countries. This analysis served as basis to understand each other and to identify possible co-operation fields among the partners within the framework of eHealth. Thus the organisations focus on possibilities to gain mutually from synergies through transnational collaboration.

If you have any comments to this chapter, please contact Henning Bruun-Schmidt, E-Mail: [hbs@rn.dk](mailto:hbs@rn.dk)

Criteria/Country	Denmark	Finland	Germany	Lithuania	Norway	Poland	Sweden
<u>Demographics: Squares</u> No. of population in million Population per square km Local special focus	43 000 km <sup>2</sup> 5.38 125 85% of population in towns.	305 000 km <sup>2</sup> 5.2 17	357 000 km <sup>2</sup> 82.5 230 Complex health care system federal/regional, corporal	65 300 km <sup>2</sup> 3.7 53 68% of the population live in urban areas	386 958 km <sup>2</sup> 4.53 11.7	322 500 km <sup>2</sup> 38.2 122	449 964 km <sup>2</sup> 9.0 22
<u>Health Care System</u>	Mainly public task financed through taxes, 2 sectors, primary and hospital where-by general practitioners act as gate keepers, free and equal access to most health services, free choice.	Mainly public task financed through taxes. Total health expenditure comprised about 8% of the GDP.	Mainly public task financed through taxes. Newly introduced private insurance members. Free access to most health services.	Mainly public task and plan to partially privatize primary care.	Mainly public task financed through taxes, 2 levels primary care and hospitals, small part of private specialists. For primary care and consultations you pay a small fee. Hospital stay free.	Mainly public task.	Mainly public task.
<u>Health Care Organisation</u>	273 local authorities, 14 countries and the State.	21 different health care districts with university and central hospitals. Primary health care in the municipalities.	2 levels: 1. State (federal level, regional level with 16 federal States) and 2. corporal level (e.g. health insurance companies).	State and its 10 regional branches.	The municipalities have the responsibility for primary care through 5 health regions the state is responsible for the hospitals and specialised care.	National Health Fund and 16 regional branches.	Each county council has the overall responsibility for the health of the population in its area.
<u>Health Care Insurance System</u>	Public Health Care Scheme, you have to choose between Group 1 and Group 2 insurances.	Public Health Care Scheme.	300 legal health insurance companies with 72 million members and 52 private health insurance companies with 7.1 million fullinsured persons.	Compulsory health insurance for all permanent residents.	Public health care theme.	One National Health Fund and its 16 regional branches.	County councils responsible for health care; social welfare to disabled and elderly individuals belong to the task of local municipalities.
<u>Number of general practitioners, dentists and hospitals</u>	3,400 general practitioners with 1,600 patients per practitioner. 2,700 dentists.	5 university, 16 central hospitals and around 265 municipal health centre hospitals 3.2 doctors/1000 population and 21.7 registered nurses/1000 population	In Schleswig-Holstein: 89 hospitals (28 in free-non-profit, 25 in public and 36 in more private sponsorship), 53 precaution and rehabilitation hospitals.	1,500 general practitioners with 2,300 patients per practitioner.			Skane: 1,000 general practitioners with 1,500-2,000 patients per p., 50% of families have a family doctor (free choice), 500 dentists, 10 hospitals.
<u>Communication between different professionals concerning the single patient</u>	MedCom health care communication network.	In 2003 the EHR was used in primary care (94%), in private sector (82%) and in specialised medical care hospitals (85%). Nation-wide EHR will be introduced by the end of 2007.	MediCom Net Flensburg, the network blood and the radiology network.		Norsk Helsenett as a provider of a communication pathway. Exchange of laboratory results between hospitals and GP electronically. Otherwise mostly paper-based. Pilots for electronic exchange of info.	Communication is mainly paper based.	
<u>Main Realised Telemedicine Activities</u>	Electronic patient registers are widely spread over hospitals, hospital networks, digital x-rays, videoconferences, teledermatology and more like Patobank.		Electronic patient document of identification, eHealth card Schleswig-Holstein, Telemedicine supply of coronal patients (TSGZ), Teleological supply of an island region.	Project Litled 1: infrastructure for telemedicine, Project Litled 2: telepathology, Baltic Medweb, Baltic eHealth, Electronic Patient Register, Internet Patient Card, E-booking, Cardiology.	Electronic patient registers are widely spread over hospitals, hospital networks, digital x-rays, videoconferences, teledermatology and more like Patobank.		Patient administrative System (PASIS), radiology administrative system, medical record, x-ray, surgery planning.
<u>International cooperation on patient basis</u>			Exclusively 5 hospitals of Schleswig-Holstein have treated by now more than 1,200 Norwegian patients through the patient bridge Norway.	Lithuanian networking for 2nd opinion, distance education, information exchange, creation of common databases; dermanet Swiss corporation			

## 1.2. Regional need analysis „eHealth acceptance and awareness”

A study was carried out about eHealth acceptance and awareness in the Baltic Sea partner regions. The partners compiled a questionnaire and asked about 500 persons in each country (Finland, Germany, Lithuania, Poland and Sweden). The survey is directed to three different target groups which are medical doctors and nurses, decision makers and the public and patients. The good response rate in all concerned countries demonstrate in a first step the general interest regarding the subject eHealth. On this basis the “eHealth for Regions” partners can consider the attitude towards and knowledge about eHealth of relevant health care actors and patients during the concrete co-operation of the partners.

### Results from Poland

#### Group A: doctors and nurses

- The acceptance for the eHealth can be described as average.
- The reason for that is the lack of knowledge on the eHealth subject and this is also mentioned as the main problem concerning eHealth.
- The level of threat concerning eHealth applications and data security is not considerable (if we take into consideration the nature of eHealth as a field of medicine which use the latest technology solutions (Internet, telecommunication)).
- The respondents noticed the benefit concerning eHealth dissemination, especially medical information improvement. Exchange of medical information up to now is rated as insufficient. Special stress is laid on the access to the full information (central archive).
- A majority of respondents expects development of eHealth network and

also faster connection to the eHealth network of almost all health care providers.

- The respondents noticed an increase in migration of people and according to that they noticed travelling patients benefits from the development of eHealth
- In their opinion eHealth will improve quality of health care
- In their opinion eHealth will improve cost effectiveness of health care

#### Group B: Decision makers

- The number of questionnaires sent back in the responding group should be evaluated as very small despite of the fact that the respondents of these group are the people whose influence on the development of eHealth in Poland should be high.
- Their knowledge about eHealth should be evaluated as average. The most often mentioned source of their knowledge are media and self education.
- The level of threat concerning eHealth applications and data security is not considerable (if we take into consideration the nature of eHealth as a field of medicine which use the latest technology solutions (Internet, telecommunication)).
- The respondents noticed benefits connected to eHealth like better access to the health care, especially in the remote areas of the regions.
- They also mentioned improvement of medical information exchange.
- The respondents noticed an increase in migration of people and according to that they noticed travelling patients benefits from the development of eHealth.
- The development of eHealth is evaluated positively, especially on the

international level, although there is fear that the development will be insufficient or there are not going to be any changes comparing to present situation.

- Majority of the respondents would like to assign funds for the eHealth in their institutions

#### Group C: patients and public

- Lack of knowledge about eHealth
- The most often source of knowledge are media, especially newspapers
- The level of acceptance for eHealth is high
- The development of eHealth will improve quality of the health care. EHealth can provide equal opportunity for health care service for people of the countries around (equal health care supply for everybody). Almost all health care providers should be connected through the eHealth network in the near future
- There is a fear concerning security of data and also application of the latest technological solutions which is probably caused by a high percentage of seniors as the survey participants. This group of people does not put much trust in the informatical technology.
- Expectations mostly concern health care strengthening and quality improvement.
- Positive opinion about eHealth influence on health care availability, especially in the remote areas of the region.

#### Summary from Poland

There is an acceptance for the eHealth idea, possible fear concerns security of data and also application of the latest informatical technology solutions.

There is a lack of sufficient knowledge about eHealth and according to that there is a need of dissemination of this knowledge to a wider range of people.

In according to the development of eHealth, people expect better quality and availability of health care (especially in the remote areas). There are also expectations concerning improvement of medical information exchange which up to know is rated as insufficient.

Majority of people expects the development of eHealth (especially on the international level). They are positive almost all health care providers should be connected through the eHealth network in the near future.

The respondents lean towards conclusion that the implementation of telemedicine will have a great impact on the cost-effectiveness of health care.

#### **Results from Sweden**

##### Group A: Doctors and nurses

- Over 80% of the personnel in the health care in Region Skåne have been in contact with one or more eHealth solutions and a vast majority can also see advantages with eHealth such as better and faster information, reduced costs, better quality of care and better organised archives.
- Almost a third of the doctors and nurses however did not think that the costs for eHealth could be motivated by the saving potential.
- The biggest problems with eHealth are, according to the doctors and nurses; lack of knowledge about eHealth, security and lack of standardisation. Only about 2/3 thinks that the security risks are small and acceptable but about 25% think that eHealth means a bigger risk for sensible information than handling papers.

- All together the survey shows a quite positive view on eHealth.
- A majority of the doctors and nurses think that eHealth can contribute to a better and faster exchange of information, faster and more secure diagnostic and treatment, reduction of unnecessary laboratory tests and higher efficiency in acute situations.
- Another positive belief is that eHealth probably or absolutely can improve the availability of health care especially in rural areas. More than 75 of the respondents think that so is the case and there are almost the same number of doctors and nurses who think that there could be advantages for the travelling patient in developing international eHealth networks.

#### Group C: Patients and public

- Although only a few of the patients had heard of eHealth before, the acceptance is quite good. Less than 10% have what you can say a negative or low acceptance of eHealth.
- Since most patients – about 80% – are Internet users and most patients also have been in contact with IT-solutions in the health care in Sweden (medical records etc) it is probably the word eHealth that is unknown and not the phenomena in itself.
- Only a few patients (5%) express negative expectations about the development of transnational eHealth.
- Among the negative expectations about eHealth, the far biggest issue is the technology and the security, which is mentioned by as much as 25% of the respondents.
- A majority of the patients think that eHealth networking will improve the availability of medical service and most of the patients answering, also think that Health can increase the access to

health care in the remote (rural) areas of the region?

- Altogether the Swedish patients have a quite positive attitude towards eHealth.

#### **Results from Finland**

Most of the respondents in all target groups were quite positive about eHealth. Especially they thought that it can optimise the flow of information. Doctors and nurses thought that eHealth can speed up the flow of information and in doing so reduce double investigations and unnecessary work. Online information can be reached at any time and at any place. That can improve the quality of care for example in acute situations. Most of the doctors and nurses (and most of the respondents in every target group) thought that eHealth can increase the availability of health care services especially in rural areas. There were still quite many doctors and nurses who said that they have not heard about eHealth before – but many of them had used at least one application of it (in most cases electronic patient record).

According to doctors and nurses the biggest problem of eHealth was the lack of standardisation, integration and knowledge about it. They were also aware of the threats it can cause to data security, but most of them thought that the threat was small and acceptable. Some believed that cost-investments for eHealth justifies with its savings potential especially for a long time. In open-ended questions some of the respondents mentioned that to develop eHealth there must also be resources allocated to it. Many thought that regional and national information systems must be prioritised.

Most of the decision makers who participated in the study knew eHealth quite well. Every one of them thought that

eHealth is an important factor in their organisation and most of them wanted to allocate more resources in it. Most of them thought that eHealth can increase the access to health care particularly in rural areas. They also thought that eHealth networking is quite important for exchanging experiences transnationally in different fields of medicine. Decision makers also thought that eHealth can improve the flow of information in health care. Like doctors and nurses, decision makers were concerned about the lack of resources, standardisation and integration. Many of them thought that the development of regional and national information systems has to be prioritised. This was quite a common view in all target groups.

Representatives of the public were also quite positive about eHealth – regardless of the fact that most of the respondents did not use internet at all, and had not heard about eHealth before. Most of their expectations about eHealth concerned the rapid supply of health care and availability of health services after duty hours. There were some doubts about eHealth in general and specifically about data security.

Most of the respondents did not believe that eHealth can provide equal opportunity for health care service for people of the countries around. They were more optimistic about eHealth increasing the access to health care especially in rural areas of the region. Respondents also thought that eHealth can improve the flow of information and in that way improve the quality and availability of health care. Doubts about eHealth concerned following things: data security, lack of human contact in care, availability and knowledge about eHealth especially among elderly people.

Most of the respondents in all target groups thought that development of eHealth in Finland is a matter of the next three to five years. There were more questions about transnational development of eHealth – most of the respondents expected no changes in that sector. Still many were aware of the increased mobility of people and the need to move online information effectively and rapidly.

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### **1.3. Report "eHealth as a facilitator of transnational co-operation on health"**

At the moment we are working on the finalisation of this report. The report will be the result from work and exchange of experiences and ideas that have taken place during the "eHealth for regions" project. The purpose of this report is to, in the context of different ongoing initiatives and developments in the area of eHealth, reflect ideas and experiences on how eHealth can facilitate and be the necessary tool for transnational co-operation on health.

The report consists of three parts where the first part describes and gives examples of transnational co-operation on health within EU. It describes co-operation in the border regions and about patients going abroad for treatment. EU citizens travel for many reasons and co-operation is needed when they need medical service. Other areas of co-operation are rare diseases where Competence centres do not exist in every country and the use of eHealth solutions to make it possible to use competence over larger areas to fill gaps in competence capacities.

The second part shows a vision on how eHealth would facilitate transnational co-operation on health. The vision will take the patients' and their families' perspective and the medical profession's perspective and will treat ethical, managerial aspects and impact of the use of evidence-based methods in the health care practice.

The third part is dealing with the challenges we will face to bring the visions to become true and with important actions that has to be taken in the short perspective and in longer run.

The chapters will be:

- ▶ Transnational cooperation on health in Europe
- ▶ eHealth as a facilitator – a vision
- ▶ How to create interest, common understanding and commitments for eHealth

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## 2. Strategy

### 2.1. European perspectives

The European Commission has set the goal of moving towards a “European eHealth Area”. Hence the European Union promotes transnational co-operation between national health systems and stimulates the further development of integrated structures. In particular, advancement in the transnational use of eHealth solutions is aimed at: “eHealth will open the door to more easily accessible and better quality health care. It can reduce errors, speed up treatment and offer important cost savings.” the Commission of the European Communities.

The citizens move today more and more across the borders. Generally in Europe the citizens are travelling for business and tourist purposes. People live abroad for longer time to study on foreign universities, for long time job missions or to spend wintertime at the Mediterranean area as a Nordic pensions. Health care has to adapt to the rising mobility of citizens. At the same time the progress in health care and medical technology lead to higher specialisation and increasing costs for medical staff and equipment.

Thus the "eHealth for Regions" network aims at sharing knowledge and resources to benefit from higher accessibility, cost-efficiency and quality in health care.

### 2.2. Strategic goals

How can we share knowledge and resources to benefit from higher accessibility, cost-efficiency and quality in health care? To answer this question the “eHealth for Regions” pioneers a common Baltic Sea eHealth Area. The project brings together relevant actors from all the regions and involves those who are concerned with health systems as well as regional development. The partners are convinced that such a cross-sectoral partnership is essential for citizens to benefit from all the potentials offered by eHealth and for promoting the attractiveness of the regions.

The specific objectives are:

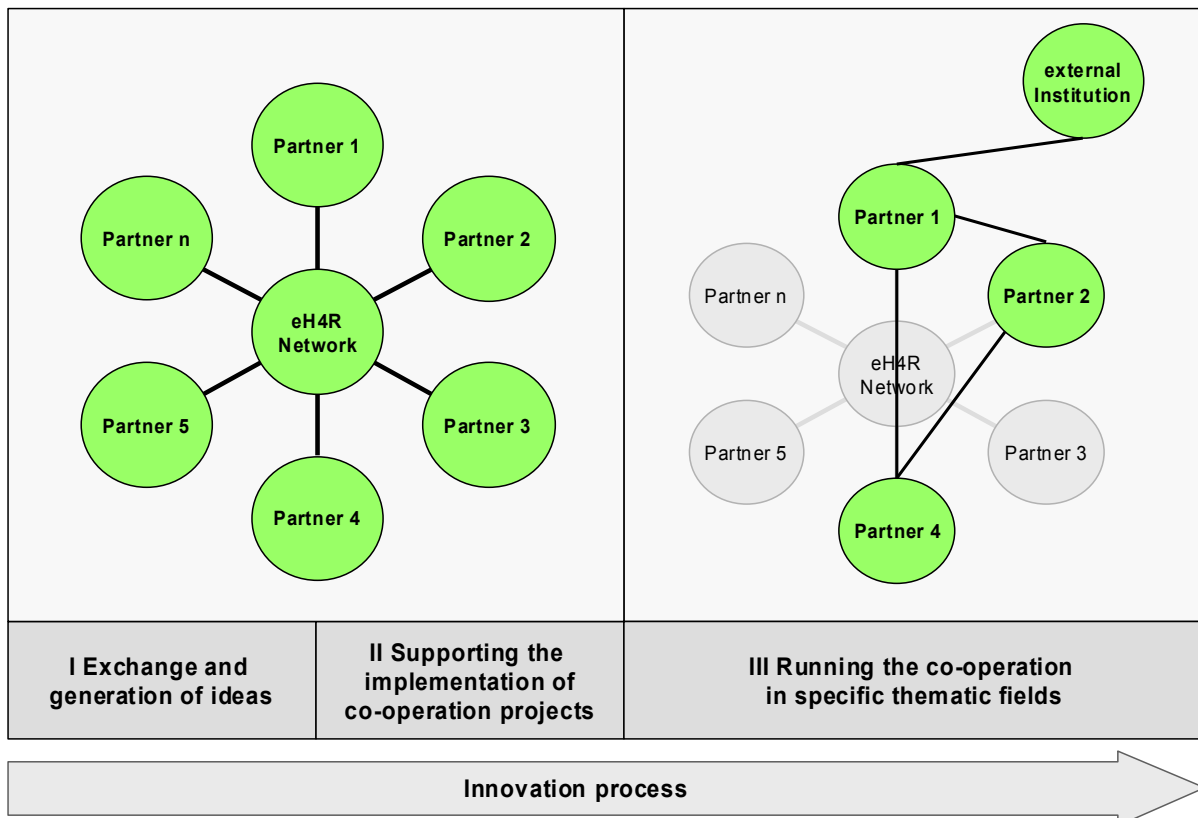
- ▶ to enhance the attractiveness of the regions by using eHealth as an instrument for regional development,
- ▶ to improve the accessibility and quality of health care available to citizens in urban and rural areas (“pervasive health care on the basis of eHealth”),
- ▶ to share knowledge and resources through transnational transfer,

standardisation and localisation of eHealth solutions,

- ▶ to promote the acceptance of patients, doctors and other actors in the health care sector with regard to eHealth services,
- ▶ to build a transnational, cross-sectoral network and develop an organisational and business model promoting co-operation in the field of eHealth in the Baltic Sea region,
- ▶ to experience the transnational network and to co-operate cross-border in the field of eHealth.

### 2.3. A network for innovation in transnational co-operation

The project partners have the aim to build up a network for innovation in transnational co-operation in the field of eHealth. The current and future network should support the innovation process by building a platform for the exchange and generation of ideas for co-operation and supporting the implementation of concrete transnational projects. This should be done by providing experiences and knowledge about the specific challenges of transnational collaboration in the field of eHealth among the network partners. Finally the co-operation should be run by the partners themselves, which are appropriate for the concrete thematic fields. These co-operations will be open for external partners.



Graphic: “A network for innovation in transnational co-operation”

## 2.4. Political Strategic Board (PSB)

The Political Strategic Board was formed in November 2005 as support of the project. This board consists of representatives of the highest political levels in the partner regions. The members of the PSB signed a Letter of Intent in Viborg, Denmark. In May 2007 the PSB will sign an agreement to ensure the built network after the end of the project.

The future tasks will be:

- ⇒ to decide on strategic guidelines for the development of the network
- ⇒ to propagate the work of the “eHealth for Regions” network
- ⇒ to set in motion development of the use of eHealth to the benefit of the citizen and the health care delivery.

Each country which has partners in the network has one vote in this political board. The members of the Political Strategic Board finance the operational work of the Executive Steering Committee and the Management Secretariat by yearly fees.



### 2.4.1. Members of the Political Strategic Board (PSB)

The PSB consists at present of the following representatives:

#### Denmark

Leif Flemming Jensen  
Councillor, Copenhagen Capital Region  
Associated member: Lisbeth Nielsen  
Vice Director, Copenhagen Capital Region

#### Finland

Aulis Ranta-Muotio  
Member of Parliament  
Associated member: Helli Kitinoja  
Seinäjäki University of Applied Sciences

#### Germany

Dr Hellmut Körner  
State Secretary Health Care of the  
Ministry of Social Affairs, Health, Family,  
Youth and Seniors of Schleswig-Holstein

Associated member: Dr Hans Jürgen Ahrens  
Executive chairman of the Federal  
association of the AOK

#### Lithuania

Gediminas Černiauskas  
Adviser to the Prime Minister of Health  
Associated member: Vilija Vertelienė  
Member of the Parliamentary Health  
Affairs Committee

#### Poland

Leszek Czarnobaj  
Vicemarshal of the Pomerania Voivodeship  
Associated member: Miroslaw Gorski  
Director of National Found Gdansk

#### Sweden

Henrik Hammar  
Region Commissioner, Region Skåne  
Associated member: Owe Svensson  
Management of the Health and Medical  
Services Department, Region Skåne

## 2.5. Organisation model

To continue the existing network also after the expiration of the investing time of three years by the European Union in May 2007 and the partner organisations, the creation and maintenance of a network “eHealth for Regions” is necessary. On the basis of the results and the built network of persons and organisations, the partners will establish sustainable co-operation structures consisting of a Political Strategic Board, an Executive Steering Committee and a Management Secretariat.

The network of international partners will gain from these organisational structures to co-operate in concrete cross-border projects in future. According to the needs of each project and subject fields necessary business cases will be developed.

### Political Strategic Board (PSB)

The PSB was formed as support of the project. For more information about the board see chapter 2.4.

### Executive Steering Committee

The future tasks of the Executive Steering Committee will be:

- ⇒ to control the work of the Management Secretariat
- ⇒ to control the budget and goal achievement
- ⇒ to support actively the progress of the single projects
- ⇒ to prepare the decisions of the Political Strategic Board
- ⇒ to ensure that all network partners informed about the latest status of activities, progress and changes on regular
- ⇒ to decide about the dissemination activities of the network.

One representative of each partner should take part in the Executive Steering Committee meetings. Each country which has partners in the network has one vote in the Executive Steering Committee.

### Management Secretariat

The future tasks of the secretariat will be: to support operationally the work of the Political Strategic Board and the Executive Steering Committee

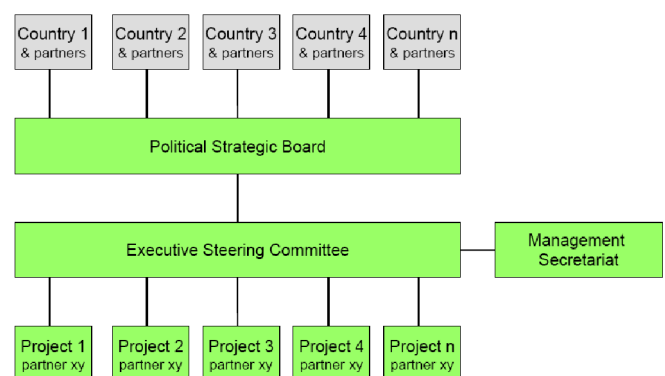
to develop an annual dissemination plan

⇒ to maintain the homepage of the network

⇒ to give the Executive Steering Committee an overview about released EU-programmes funds on regular basis.

### Project level

The partners will constantly develop new project ideas for cross-border and transnational co-operation in the field of eHealth. They will benefit from the described structures to find partners, build on experiences, knowledge and resources.



*Graphic: Organisation model*

If you have any comments to this chapter, please contact Thorsten Beck, Germany  
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### 3. Co-operation fields and pilots

#### 3.1. eCardiology

The field cardiology was selected for the pilot implementation because coronary heart diseases are the most expensive diseases in term of re-hospitalisation in the USA and Europe as well. eHealth structures support small hospitals, family doctors and ambulance services. The same telecardiological eHealth solution can be applied and experienced in three fields: home care, second opinion from experts across the network (national and transnational) and patient hospital relation. The pilot implementation in the field of eCardiology aims to home care and/or for monitoring high risk patients waiting for an invasive diagnostic or bypass operation.

**Partners:** Denmark, Finland, Germany, Lithuania, Poland, Sweden

#### Overall Objectives:

- implementation of ECG solution in Denmark, Finland, Lithuania, Poland and Sweden
- better health care in remote areas and urban areas
- to enhance the patient comfort in terms of confidence, security and mobility
- more effective management of patients with known heart disease and to provide the appropriate care level to the patients
- less number of visits to health institutions (primary care centre, specialist department), reduction of pre-hospital delay and to save hospital capacities

#### Methodology and Transnational Value Added:

- Either medical staff like home nurses or patients are equipped with ECG devices according to the partner region (see implementation status below).

- After recording an ECG the transmission of the ECG records is organised cross-border via telephone calls from medical staff or patients in different countries to a multilingual server located in Bad Segeberg, Germany. The ECG and patient data is transferred via Internet to medical specialists in the different countries where the call came from to decide about appropriate treatment.
- The calls for medical staff and patients are via a toll free line. The project partners pay a monthly fee per ECG device including the server based services.
- The sharing of a server located in Germany and buying the related services cross-border avoid investments in the partner regions.

#### Status of Implementation:

- Region Skåne: home nurses equipped with 35 devices (see film)
- Kaunas Region: 15 patients waiting for heart operations equipped with 15 devices.
- Lebork: 10 patients equipped with devices to be monitored after acute coronary syndrome.
- In Finland technical tests were carried out with home nurses.

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#### 3.2. eRadiology

Existing electronic distance technologies should be used to transmit picture data between the partners for diagnostic and second opinion applications. At the moment there is a demand for radiologists in Lebork which cannot be met at special times. Therefore it is planned to transmit picture data to Diako hospital in Flensburg

where radiologists examine the pictures and give a second opinion to their Polish colleagues.

**Partners:** Germany, Poland

**Overall Objectives:**

- to establish the co-operation between Poland and Germany to provide second opinion from radiologists via Internet
- to provide virtual medical resources to rural areas and to secure the supply of health care to patients

**Methodology and Transnational Value Added:**

- Radiology images should be transferred via Internet between Leborg hospital and Diako hospital in Flensburg from where radiologists send back a second opinion. The partners discussed to use a technical infrastructure which could be provided by the Interreg III B project Baltic eHealth.
- It is foreseen that payment for second opinion will be done per patient.
- to make resources available cross-border
- better transnational capacity-utilisation between the partner organisations

**Status of Implementation:**

- The agreements between Leborg hospital and Diako hospital in Flensburg are currently under negotiation.

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**3.3. Exchange of patient information**

„Personal information medical sticks“ are developed for patients with chronic diseases, who are often travelling in European neighbour countries on business or vacancies. A normal USB

stick contains medical history, administrative data, diagnostic documents and information for physicians and specialists. The simple technical form enables many physicians in foreign countries to open and use the data. The data structure is based on the European emergency health card. In future an extension to an electronically patient record based on the Web is foreseen.

**Partners:** Denmark, Finland, Germany, Lithuania, Norway, Poland, Sweden

**Overall Objectives:**

- to improve the cross-border medical service, especially for travelling patients with chronic diseases
- to support physicians with information treating foreign patients
- to omit unnecessary examinations of patients

**Methodology and Transnational Value Added:**

- to support the mobile citizens
- to ensure the transfer of patient data cross-country

**Status of Implementation:**

- USB sticks are prepared with structured medical information based on the European emergency health card
- In Germany two travelling groups with elderly persons were provided with the USB sticks.
- In Finland the sticks are allocated to university staff and students, which are expected to travel frequently.
- The partners in the other countries benefit from the evaluation results in Germany and Finland as basis for possible future implementation.

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### 3.4. Geographic Information System (GIS)

The focus is the development of a cartographic overview of cross-sectoral service providers in the field of health care. In the District of Segeberg this Geographic Information System is implemented. The experiences should be transferred to "eHealth for Regions" network partners who are interested in this solution.

A target group are tourists which can inform themselves about the health care provision in their holiday region. Furthermore the GIS serves for benchmarks of the health care level and thereby supports regional developers: maps of neighbourhood medical care and care in the community, general practitioner and pharmacies.

**Partners:** Germany, Lithuania

#### Overall Objectives:

- citizens, tourists and travellers should get with information about nearest health care providers (e.g. general practitioners, hospitals, pharmacies)
- regional planners should get a planning tool in the field of health care supply

#### Methodology and Transnational Value Added:

- existing data bases about health care systems are used and connected to GIS technology, the information should be provided for free on the Internet
- project partners exchange ideas and experiences for application of the GIS solution

#### Status of Implementation:

- "eHealth for Regions" partners from Lithuania are interested in getting experiences.

If you have any comments to this chapter, please contact Thorsten Beck, Germany  
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### 3.5. Supporting the implementation of a web-based electronic health record

"eHealth for Regions" partners exchange their knowledge to support the development of an integrated telemetric service system. Main focus of the co-operation is a web-based patient record in English and Polish language. This patient record should be used for communication across different sectors like universities and the medical network to optimise the treatment of heart patients (heart record). This heart record should be developed in an open form so that in future additional medical foci can be integrated. The system should be extended to whole Pomorskie region and to further Polish regions.

**Partners:** Germany, Poland

#### Overall Objectives:

- to support the implementation of the web-based electronic health record in the pilot region

#### Methodology and Transnational Value Added:

- "eHealth for Regions" partners from Finland provide experiences about electronic health records and German partners give organisational support to their Polish colleagues.
- The experiences from Poland gathered during the implementation of the web-based electronic health card should be transferred to the network partners. E.g. the English version of the health record could serve other regions as example.

#### Status of Implementation:

- The needs for information in the field of heart disease are described, in spring 2007 a pilot test is foreseen.

If you have any comments to this chapter, please contact Thorsten Beck, Germany  
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### 3.6. Ferries with Tele ECG at the Baltic Sea

The TT-Line recently equipped all ferries with a transtelephonic ECG device. This give them the opportunity to transmit a ECG, recorded by the crew members, to one of our cardiac centres, connected to the “eHealth for Regions” network.

#### Partners:

- TT Line, a large shipping company in the Baltic Sea Area. Their six ferries transport about 2,000 to 4,000 passengers every day between Trelleborg (Sweden) and Travemuende or Rostock (Germany).
- Segeberger Kliniken, department for telemedicine, Germany
- County hospital Hässleholm, department for cardiology, Sweden

#### Overall Objectives:

- a better health care support for travelling citizen
- to evaluate the feasibility and effectiveness of transnational eHealth
- to reduce the time from symptoms to treatment

#### Methodology and Transnational Value Added:

- The first aid rooms of the ferries of the TT-Line are equipped with a transtelephonic ECG recorder.
- The crew is trained and can record an ECG from a critical passenger.
- The ECG will be transmitted to the multilingual server of the telemedicine centre in Bad Segeberg, Germany and routed from there to the co-operating cardiac centres in a readable format.
- The verbal communication follow up is done in either Swedish or German language, depending of crew native.
- The co-operation with a private shipping company enlarge the network

and furthermore the sustainability of the “eHealth for Regions” project.

#### Status of Implementation:

- All crew members are trained.
- The network can extend without any additional work to Denmark, Poland, Finland, Lithuania or other Baltic Sea countries

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### 3.7. Common eHealth conference

The conference “Cross-border eHealth in the Baltic Sea Region” from 21 to 22 May 2007 will be organised in co-operation with the project “Baltic eHealth”. The two projects will show the project results, challenges, strategies and the projects of the future.

**Partners:** Denmark, Finland, Germany, Lithuania, Norway, Poland, Sweden

#### Overall Objectives:

- to show the results of the two projects, challenges, strategies and the projects of the future
- to bring together persons from the health sectors, who are involved in the health processes in the close sense, but also persons from fields such as IT, business, policy, administration, spatial planning and education

#### Methodology and Transnational Value Added:

- to disseminate information about both EU-funded projects
- to promote the use of eHealth in Europe

#### Status of Implementation:

- The conference was held.
- Publicity material is developed, i.e. a conference brochure and a website.

For all presentations and more information see [www.ehealthconference.info](http://www.ehealthconference.info).

If you have any comments to this chapter, please contact Thorsten Beck, Germany  
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**Cross-border eHealth  
in the Baltic Sea Region**  
Stockholm, Sweden, 21-22 May 2007



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[www.eHealthforRegions.net](http://www.eHealthforRegions.net)

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