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Baltic eHealth

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With the introduction of eHealth services to the Baltic Sea Region, the Baltic eHealth project aims to provide for more equal treatment opportunities and thereby counter-act the tendency for rural migration. Baltic eHealth provides one solution for achieving the aim with the establishment of the Baltic Health Network that enables point-to-point remote reporting. In the future, a pan-European eMarketplace can take over and allow the same opportunities across all of Europe.

Current Situation

One of the great challenges facing healthcare delivery in Europe today is the lack of medical specialists, particularly in Europe's rural regions. As with other countries, Denmark also experiences great challenges in this respect. The Danish profile shows a country with a high proportion of outskirts and isolated areas, a predisposition among the population to seek urban centres and a general lack of specialists and doctors. The Danish situation is therefore a perfect illustration of the tendencies and problems in demographics and healthcare delivery to citizens in many European countries.

Shortage of Specialist

Three out of four permanent specialist doctor positions are vacant in the rural regions of Denmark. As a result, many small local hospitals have been closed down and further hospital closures may be forthcoming for those that do not possess specialised competences and treatment methods. Keeping a hospital running that can only offer simple consultations and procedures is not cost-effective and resources are perceived as being better spent elsewhere. This is highly unpopular amongst the rural population, who feel that by closing local hospitals, their easy and fast accessibility to treatment will be removed.

An increasingly aging population and a general rise in chronic diseases, combined with a smaller percentage of people of working age, inevitably causes a shortage of doctors throughout Denmark. One attempt to overcome this has been to attract specialists from other countries. In some cases, the situation is so serious that regional hospitals would be forced to close down wards, were it not for foreign specialist doctors.

However, the Danish situation is not unique and the rest of Europe is experiencing similar problems. Wooing foreign doctors to Denmark simply exports the problem and causes a brain drain -especially in the new EU Member States, where doctors see a chance for earning a better living by working in the older EU countries.

The Solution: Cross-Border eHealth

Cross-border eHealth allows for medical resources to be distributed and can be an aid in avoiding the brain drain from other hospitals or countries. As an example, an Estonian specialist can perform his work at a hospital in Estonia and, as a supplement, perform expert consultations through an eHealth tool to other countries against payment. This solution removes his financial incentive for moving abroad and the negative circle has then been broken.

eHealth solutions may also function as an incentive for professionals in seeking employment in the outskirts. The immediate access to specialist help and second opinion, when needed, is a positive incentive for employment and attracts professional resources as opposed to having them abandon the area.

Baltic eHealth

Baltic eHealth, a project part financed by the European Union under the BSR INTERREG IIIB programme, was initiated in 2004 and brings together five partners from the Baltic Sea Region: Denmark, Norway, Sweden, Estonia and Lithuania. Each partner has their own core area of expertise; some are clinical partners that are familiar with digital healthcare communication, while others are knowledge centres or experts in eHealth or regional development.

The overall aim of the Baltic eHealth project is to facilitate cross-border eHealth and thereby contribute to the prevention of rural migration without brain drain in some countries. The project comprehensively examines the obstacles to cross-border eHealth. Infrastructure, legal issues, economy, organisational matters, cultural and linguistic barriers are addressed and solutions on how to overcome the barriers are found and also – at least when it comes to some of the major technical barriers – implemented on a large scale.

The Baltic Health Network

From Point - to - point Pilots to a Pan - Europeane Market place

Baltic Health Network. The network is built on top of already-established national networks in Denmark, Norway and Sweden, where visionary national health strategies have resulted in a national health network in each country that connects all hospitals – and in addition, a wide range of other stakeholders in the health sector such as: general practitioners, laboratories, homecare services, etc. Two regional networks at hospitals in Vilnius, Lithuania and Tallinn, Estonia have also been connected to the Baltic Health Network. The goal is to create an association which can continue the operation and further development of the Baltic Health Network after the project phase is completed and any new hospital that wishes to connect to the network, provided that it adheres to the security rules of the network, is welcome to join.

eHealth in Practice

The Baltic Health Network has been running since September 2005 and field trials are currently testing the infrastructure of the network in the fields of radiology and ultrasound.

eRadiology

eRadiology enables a hospital to have an easy and fast transfer of digital images for reporting regional or national location of the sending or receiving hospital. In Baltic eHealth, eRadiology is being tested between a small rural Danish hospital and University clinics in Lithuania or Estonia.

eUltrasound

The eUltrasound pilot ensures the same expertise in the assessment of pregnancy scans performed on women living in rural areas of Västerbotten, Sweden as those living close to larger hospitals with obstetrics and ultrasound specialists. If a doctor is uncertain about the result of a scan and needs to consult a colleague for a second opinion, the scan can be transferred digitally to a specialist at the Norwegian National Centre for Foetal Medicine in Trondheim, Norway. As such, eUltrasound promotes transnational co-operation in terms of obtaining specialist second opinions.

Barriers to eHealth

The trans-national Baltic Health Network has removed one important technical barrier to cross-border eHealth – security. This has been achieved by establishing a secure IT infrastructure for more than 200 hospitals in Denmark, Norway and Sweden and two hospitals in Vilnius and Tallinn. Another barrier that has been solved is linguistics. A Structured Reporting Tool (SRT) has been developed and now provides a concrete solution for multilingual secretaries to fast, structured and successfully managed cross-border image reporting.

Nevertheless, the introduction of eHealth has other challenges and barriers in addition to technology and language. The legal issues of privacy, confidentiality and information security are vital in health-care. Cross-border eHealth also naturally presents the question of doctors' licences to treat outside national borders.

Organisational changes are another issue to take into account. A change in normal workflows by the introduction of new tools must be thoroughly approached. From an economic side, eHealth creates a problem in terms of reimbursement for cross-border services. If they are not publicly reimbursed, who will pay the costs? Baltic eHealth has identified the non-technical barriers to cross-borde eHealth and developed comprehensive guidelines for overcoming these challenges. The guidelines document is available to anyone interested on the Baltic eHealth website at: www.baltic-ehealth.org.

eHealth as the Healthcare Delivery of Today and Tomorrow

While the Baltic eHealth project runs until August 2007, in May 2007 the results of the project will be presented at the "Cross-border eHealth in the Baltic Sea Region" conference in Stockholm, Sweden. However, it can already be concluded that Baltic eHealth has successfully implemented a cross-border IT infrastructure for eHealth - the Baltic Health Network.

Until now, the solution has enabled point-to-point remote reporting in the Baltic Sea Region, but the possibilities and advantages are much larger and exceed the region. A virtual marketplace for the buying and selling of imaging-related eHealth services over a trusted and secure framework that is not limited by national borders or distance is the next step.

Pan-European dissemination of remote reporting opens many opportunities for fast and equal healthcare delivery. An eMarketplace can help prevent the emigration of the population from European rural areas by supplying entire regions with the same qualified and specialised medical support that citizens in urban areas have access to. In doing so, it will help turn around the negative tendency of the outward migration of doctors that most EU Member States experience and instead transfer resources in to the region rather than out of it. In conclusion, the Baltic eHealth project and the eMarketplace seek the solution for healthcare delivery for the European patients of today and tomorrow.

More information on the Baltic eHealth project is available online at: www.baltic-ehealth.org.

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