eHealth strategy and implementation activities in Lithuania

Report in the framework of the eHealth ERA project

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About *eHealth ERA* and this report

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The European Commission, Directorate General Information Society and Media, supports this project to contribute towards greater transparency across Member States and other participating countries on eHealth strategies as well as innovation-oriented research and technology development (RTD) initiatives, including the coordination of Member States' eHealth strategy formulation and implementation. Thereby the project aims at fostering the establishment of an effective European Research and innovation Area (ERA) in eHealth. All project results are available on the internet and can be accessed at the *eHealth ERA* website: www.ehealth-era.org.

The status of activities described is generally August 2006.

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Country Report: *Lithuania*

1 Executive Summary

Lithuanian health care policy is being implemented according to the guidelines included in the major health policy document, the National Health Concept. The Ministry of Health is the leading ministry responsible for development of eHealth policy in Lithuania. The general goal expressed in the strategy document “eHealth Strategy for 2005-2010” prepared by the Ministry is the use of information and telecommunication technologies for improvement of the efficiency of the healthcare system. The objectives indicated in the strategy document are planned to be accomplished through development of the eHealth Information System. Target groups of the national ehealth strategy include patients, citizens and health professionals. Among priorities, patient empowerment is one of key issues. The access to information and services should be enabled with ehealth solutions in order to assure the patient-centred approach. The strategy of ehealth development in Lithuania is composed of several key elements. They include development of the model for management system, definition of the priorities in the ehealth field, description f the public health monitoring system and integration of healthcare registries in health information system. The formation of the infrastructure of the ehealth system is necessary for building these elements of the strategy. The availability of standards od data transmission and interchange was also underlined as key condition for accomplishment of eHealth Strategy goals.

On the implementation side, the Telemedicine Centre of Kaunas University of Medicine develop many activities focused on the provision of specific services in the context of ehealth and telemedicine. The mission of the Telemedicine Centre is to initiate, form and introduce telemedicine developments in the University and in the country, and to prepare policy recommendations for health care institutions and government institutions. The vision which is behind the measures related to development of infrastructure and conditions supporting ehealth, undertaken by central and regional institutions and organisation in Lithuania focuses on the bringing of comprehensive environment of services to empowered citizens and patients. The support for health professionals who are able to provde high quality services to the society on the basis of evidence-based strategies is also key target of this vision.

2 Basic Facts

Lithuania is located on the Eastern shores of the Baltic Sea. Its area is 65,300 square km, population 3.4 million. Lithuanians make 81.3% of the population, Russians 8.2%, Polish 6.9% and Belarusian 1.5%. National assembly called Seimas (Parliament) consists of 141 members elected every 4 years. Predominant part of inhabitants (about 80%) belongs to Roman Catholic Church. On May 1, 2004 Lithuania became a member of European Union.

3 Healthcare System Overview

3.1 Basic Facts and Features of the Healthcare System

3.1.1 The Main Decision Making Level for Health Care Policy in Lithuania

The Health Insurance Law was approved in 1996 in Lithuania. It foresees a compulsory health insurance for all permanent residents in Lithuania, independently from their citizenship. This compulsory health insurance is executed by one state institution – the State Patients' Fund (SPF). In 2003 SPF spent 158.8 Euro in average per one insured person. Funds used by the health sector in Lithuania make about 6 per cent of the GDP. Visits to the doctor, treatment at the hospital (including medicines) and rehabilitation are completely compensated from the compulsory Health Insurance Fund. Those who are not insured may apply only for a necessary medical aid. Such persons should pay for other services on the basis of the prices set by the Ministry of Health. An additional private health insurance is foreseen in the Health Insurance Law; however it is still not popular in Lithuania and is used by a small part of the population with high income [6].

Mission of the Ministry of Health is to form and implement health policy, ensuring public health, high quality of health activity and rational use of resources. The Ministry of Health is responsible for the change of the healthcare system so that it ensures accessibility and maximum quality of health services with the use of available resources [6].

Strategic objectives of the Ministry of Health

Strategic objectives of the Ministry of Health encompass:

- Provision of public healthcare by strengthening disease prevention and control;
- Provision of an accessible and qualitative healthcare by improving performance of personal health care institutions;

- Control of pharmaceutics market to assure that only qualitative, safe, efficacious and cheap drugs meeting EU requirements prevail in the Lithuanian market;
- Increase of effectiveness of healthcare by improving administration and financing of the health care system;
- Control of effective use of the funds allocated to the personal health care.

Tasks and Measures of the Health Care System

Following the strategic objectives, ten programmes are being implemented in Lithuanian healthcare [6]: Public Health Care Consolidation while Integrating into the EU Health Care System; Quality Assurance of Personal Health Care; National Policy on Medicines; Development of the Health System; Consolidation of the Health Insurance System; Special Programme for the Consolidation and Modernization of Health Care and Pharmacy; National Programme for Drug Control and Prevention of Drug Abuse; Special PHARE Programme; Special Programme of the European Regional Development Fund (implementation of SPD); and VAT Programme for EU Structural Funds Support and National Co-financing Funds.

The efforts are made to bring the quality health services to the level according the European Union standards. Following steps were planned to achieve this goal:

- The change of the network of public and personal health care establishments;
- The development of an integrated information system;
- Continuation of the provision of additional training and professional improvement opportunities for specialists of various fields in order to enable them to carry out tasks rose for the health care system properly.

3.1.2 The Main Healthcare Service Delivery Systems in Lithuania

The main healthcare service delivery systems in Lithuania include [6]:

- Family Health Care

  Family health care is based on the institution of a family physician. This position in Lithuania has been introduced taking into account the experience of other countries. Family physicians are responsible should maintain not only direct care activities like diagnosing and treating patients, but should also target the health preservation and disease prevention functions. Family physician plays the role of a counsellor or a coordinator guiding through the health system, offering the consultation on elementary health issues, monitoring the occurrence of chronic diseases and making the referrals for necessary specialist consultations. Licensed family physician takes care of the

inhabitants registered at the primary health care facility (out-patient clinics, family doctor centres).

- Specialized healthcare

  Specialized personal healthcare services are delivered by county and municipality-owned hospitals and out-patient clinics. Specialized healthcare included in the end of 2002 188 hospitals (among them 72 general and 36 specialized hospitals as well as rehabilitation or nursing hospitals), 452 out-patient institutions

The total number of beds available for in-patients is equal 30 555 beds, including 12 181 in cities, 8417 in regional centres, 2929 in nurseries, 6356 in specialized and 620 in rehabilitation hospitals.

3.2 National Level Health Goals

Lithuanian health care policy is being implemented according to the guidelines included in the major health policy document, the National Health Concept. In this document considerable emphasis was put on the issues of health preservation, disease prevention, primary health care development and preparation of specialist care to the EU requirements. Modern public health concept was developed in Lithuania with referring to key legislation issued by WHO and EU. The Law on Public Health Care and the Law on Public Health Monitoring law were accepted in 2002. These Laws gave the background for the implementation of the public health system reform compatible with the EU legal requirements. The system is supposed to ensure efficient disease prevention, monitoring function, health education and professional training [6].

There are several priorities for healthcare system in Lithuania. The first priority is disease prevention. The special address in this context was given to schoolchildren's health. There are plans to develop care model at schools, which would support schoolchildren to preserve and strengthen their health. The project "Youth Friendly Services in Lithuania" started in Lithuania goes in line with this aim through strengthening the health status and protection of young people as well as founding the services for the youth focused on the prevention of AIDS, bad habits, venereal diseases, violence and suicides.

The second main priority is the preservation and strengthening of public health to decrease overload of the healthcare system. This task is supported by the Lithuanian movement for a healthy living established in February 2003.

Currently, the Government and the Ministry of Health undertake effort to increase the prevention of drug addiction, also through institutional support. The Department of Drug Control prepared a new state drug control and drug addiction prevention programme for 2004-

2008. The Department will act for the implementation of the Programme as well as improvement and better coordination the activities of state and local institutions.
Other priority initiatives include: the State HIV/AIDS Prevention and Control Programme for 2003-2008, the State Food and Nutrition Strategy for 2003-2010, the State Programmes for Mental Health and for Suicide Prevention [6].

4 Strategic eHealth Plans/Policy Measures

4.1 National-Regional eHealth Policy

The strategy for the development of Lithuanian information society was approved by the Government in 2005. Facilities plan of implementation of e-government was approved by the government in 2003.The Ministry of Health of the Republic of Lithuania is the leading ministry active in development of eHealth policy in Lithuania. The Ministry held main responsibility for drafting the national eHealth roadmap ("eHealth Strategy for 2005-2010)".

Earlier, the Health Economics Centre prepared policy document within the project financed by the World Bank titled "Lithuanian eHealth Strategy and Program – year 2004-2010". It became available in 2004. This project was supposed to assist the Ministry of Health in developing official eHealth strategy [5]. The aims of the project financed by the World Bank and carried out by the Health Economics Centre included promotion the health care reform which would ensure effectiveness, quality and accessibility of health care services for patients by the use of comprehensive eHealth system. Such system was expected to enable reliable, secure and timely health information exchange and to use of modern IT infrastructure. The eHealth System should provide information for comprehensive administrative and clinical decision-making [5].

The activities carried out within the project covered:

- The assistance to the Ministry of Health in developing a National Strategy for eHealth, Information Management and Technology Development for 2003-2008 based on the needs of patients, health system administrators and providers as well as on international eHealth experience.
- Development of the model of resource management system taking into account data on services actually rendered, data processing and analysis, medicine sales accounting, resource (human, financial etc.) planning, allocation and accounting on national and institutional level.

- Definition of the eHealth priorities and development plan covering issues of telemedicine: clinical decision support, tele-care, monitoring, patient health record, distance learning, rising patient awareness etc.
- Proposal of the model of computerization and networking of institutions covering GP rooms, outpatient clinics, hospital information systems.
- Definition of the public health monitoring information system according to the main EU activity areas.
- Integration of the health care registers and databases in the integral health information system;
- Formation of the infrastructure of the eHealth system: technical resources, data transmission infrastructure and data interchange standards, safety.
- Assistance to elaborating the action plan (EHealth Program 2003-2008) for the implementation of the National Strategy for eHealth, Information Management and Development of Technologies, obtaining the harmonization with information interchange standards, and regulations to start up health record system.
- Assistance in elaborating investment project based on priorities set up in the Strategy implementation action plan.

The Ministry of Health, State Patient Fund and several large hospitals in Lithuania are the main “players” expected to participate in the process of development of eHealth Information System. The document “eHealth Strategy for 2005-2010” prepared by the Ministry in 2004 yields a comphrehensive vision of the ehealth environment development in Lithuania.[13] The main aim of the Strategy described in the report “eUser Online Services and User Orientation, EHealth country report for Lithuania” include restructuring of the whole system of healthcare with ICT in order to assure its higher efficiency. The requirements from the main group including patients, health professionals and healthcare management staff made the basis for the ehealth strategy development. The use of ehealth services is supposed to improve the quality and the accessability of healthcare services. The patients will be encouraged to involve themselves actively in the care processes. The provision of information about available health services, medicines, healthy living and health risks to citizens is also one of important objectives of the Strategy. In the context of quality of healthcare the need for improved and user oriented health services was indicated. User friendliness could be increased through availability of Internet-based or telephone-based functionalities, e.g. registration for visits or remote consultations. The need for the improvement of the security of patients records is also addressed

The implementation work toward achieving the eHealth roadmap goals work started in 2005. The feasibility study “eHealth system development in the healthcare sector of the Republic of Lithuania” was developed by Ministry of Health.

Currently, pilot eHealth System is being developed. The implementation of the Information System was divided into 5 stages, stages 1 and 2 should have been accomplished by the end of 2006, others by the end of 2008:

- Stage 1 – National eHealth core with tools for ensuring exchange of information.
- Stage 2 – Implementation of the national-level eHealth system Pilot installation of main functions of the national-level eHealth system.

Two initial stages of the implementation process cover following tasks:

- Analysis of Lithuanian and EU legal acts related to further development of eHealth and formulation of the main requirements
- Analysis of related processes and information flows
- Detailed principles and requirements for information security and confidentiality for the system
- Detailed principles and requirements for identification of patients, doctors and other users in the system
- Detailed requirements for the necessary related registers
- Detailed principles and requirements for information exchange and interfaces with other systems
- Principles and detailed requirements for storage and transfer of critical patient information
- Analysis and detailed requirements of the selected 4 functions processes
- Creation of the core and 4 functions
- Integration of the core, 4 functions and other related systems
- Installation of the core and 4 functions and their launch in the pilot institutions
- System testing
- System acceptance
- Equipment specifications
- Tender documentation
- Computer equipment for end-users
- Delivery of equipment
- Installation and final acceptance of the equipment

There have not been any preliminary plans or experiences in extending eHealth implementation to the field of social care yet. The activities held within Baltic Health Network project could be an example of multi-lateral cooperation between the Lithuania and other Member States in the field of eHealth. [1]

The document on eHealth Strategy is available on the website of the Ministry of Health. General dissemination activities were undertaken to promote the awareness of its contents to various users group, e.g. talks delivered during conferences and workshops.

4.2 Investment and Reimbursement Framework

Some investment capacities are foreseen in national strategy for purchases of hardware, software and professional training. The funding sources used for eHealth investment in the scope of previous activities were Regional Funds, Structural Funds as well as World Bank.

5 eHealth Deployment Status

The section presents the eHealth infrastructure, applications and services as well as interoperability and standards in Lithuania.

5.1 eHealth Infrastructure

5.1.1 Physical Networks – History, Implementation Approach and Development over Time

eHealth Network (Net Lit) based on ISDN and Internet was developed in the area of Kaunas (Kaunas Medical University Hospital, Telemedicine Centre of Kaunas University of Medicine, Telemedicine Support Centre of Kaunas University of Technology).[12][14] Net Lit is based on the synergy of Kaunas eHealth cluster partners and interrelated eHealth projects around patient care which is supported by clinical practice, research and education. The improvement of the quality of patient care is its main goal.[11]

Existing fibre-optic infrastructure connecting most of urban centres may also be used by medical institutions. EHealth services delivered through existing regional networks encompass tele-consultations in several specialities, tele-pathology and teleophthalmology.[3][9][10][11] No relevant information has been found on the plans for future development and expansion of these eHealth networks.

5.1.2 Legal and Regulatory Framework – Overview and Discussion

There is national/regional legislation in Lithuania addressing the following issues: data protection, telecommunications (with regard to data protection and confidentiality) and digital signatures. Relevant legal act and laws are enlisted below:

- Republic of Lithuania Law on the Legal Protection of Personal Data, 1996, amended on 17 July 2000 and then again on 21 January 2003. Actual wording since 13/04/2004

- The Law No. VIII-774 on Telecommunications of 9 June 1998
- The Electronic Signature Law of 11 July 2000

National bodies and authorities responsible for overseeing and/or co-ordinating the development and enforcement of the legal and regulatory requirements are as follows:

- in the area of data protection:
  - State Data Protection Inspectorate,
  - Communications Regulatory Authority of the Republic of Lithuania,
  - State Data Protection Inspectorate,
  - National Consumer Rights Protection Board,
  - Ministry of Transport and Communications of the Republic of Lithuania.
- in the area of telecommunication:
  - The Government,
  - The Ministry of Communications,
  - The Committee of Information Society Development,
  - The Communications Regulatory Agency.
- in the area of electronic communication:
  - Communications Regulatory Authority of the Republic of Lithuania,
  - State Data Protection Inspectorate,
  - National Consumer Rights Protection Board,
  - Ministry of Transport and Communications of the Republic of Lithuania.

National legislation targeting harmonization was targeting following EU regulations: Data Protection Directive, Recommendation on Protection of Medical Data, Directive on electronic signatures, Directive on privacy and electronic communications as well as eCommerce Directive. Relevant legal act and amendments are enumerated below:

- Republic of Lithuania Law on the Legal Protection of Personal Data, 1996, amended on 17 July 2000 and then again on 21 January 2003
- Law on electronic signature (July 11, 2000. No. VIII – 1822, amended as of June 6, 2002. No. IX – 934)
- The Law on Electronic Communications of 15 April 2004

Currently the Lithuanian e-commerce framework is based on the general norms of private law, consumer protection law, data protection law but the Lithuanian Parliament has registered the draft law aimed at transposing the Directive 2000/31/EC.

5.1.3 Education and Training on ICT – Overview and Discussion

It was indicated in the National Concept of Development of Information Society that the level of computer literacy is quite low in many areas of Lithuania, particularly in rural areas (in 2001 only 8% of population used internet, in rural areas the share was only 1%). The objective

stated in the Concept was to involve every citizen, family and school, enterprise and public institution in the digital era. The main documents on the development of Information Society in Lithuania cover programmes related to training and education about ICT use.
Tasks included in these programmes include computerization of schools and libraries, creation of public internet access points, digital community projects, training of educators on ICT, use of open code, promotion of remote studies, and increasing the competencies of unemployed people through the use of IT.

Nevertheless, it seems that there are no education programmes available on the national or regional level to promote the acquisition of necessary general (or eHealth-specific) ICT skills by health professionals or healthcare administrative and supportive personnel.

Kaunas University of Technology developed has a programme for undergraduate (bachelor's degree) study programme in informatics with medical informatics specialization.

5.2 eHealth Applications and Services

5.2.1 Electronic Health Records

The pilot eHealth System is in stage of development. One of the main tasks of this initiative is creation of the unified standardised EHR in Lithuania, based on standards such as HL7, CDA and SNOMED.

5.2.2 Health Cards

Territorial Patient Funds are issuing health cards in Lithuania. The State Patient Fund created a database (European Health Insurance Card Management System) for public use to check the validity of EHICs which had been issued by Lithuanian Territorial Patient Funds.

5.2.3 Health Portals

The wwww.sveikata.lt is the largest health-related portal in Lithuania. Its target groups of users include citizens, patients and health professionals. Yellow pages and general health information are the basic types of contents offered within this portal. It contains also the links to health institutions, GPs, and health-related resources for the specialists as well as the society in general.

5.2.4 Telemedicine Services

Telemedicine services are introduced by the Telemedicine Centre of Kaunas University of Medicine. The mission of Telemedicine Centre is to initiate, form and introduce the politics of telemedicine development in the University and in the country and to prepare

recommendations for health care institutions and government institutions.[14] The key priorities of the Centre activities include:

- Provision of methodical leadership for application of telemedicine technologies for medical diagnostics, consultation, monitoring and scientific investigations in all stages of the studies and postgraduate studies; and coordinate them;
- Navigating through the programs and financing sources which could stimulate the development of telemedicine;
- Organization of sessions and conferences on telemedicine;
- Organization and participation in national and international telemedicine projects.

The Telemedicine Centre services cover following fields: teleconsultations and second opinion services, distance education, image processing as well as information exchange and creation of international databases.[3][14] The Centre maintains also working contacts with institutions from Scandinavian countries within regional cooperation schemes. The examples of partnering institutions are St. Erik Eye Hospital in Stockholm, Stockholm County Council and Lund University Hospital.[14]

5.3 Interoperability and Standards

By the end of 2006 the technical health ICT standards such as: HL7 CDA, HL7 V3, EN 12251:2004 were planned to be adopted and implemented. The relevant decision-making body concerning the use of healthcare coding and classification systems is the Ministry of Health.

Some specific initiatives related to semantic interoperability (generally or specifically for healthcare) are conducted in Lithuania by the Ministry of Health. The coding and classification system that is in use in health ICT applications on the regional or national level is TLK 10. This system is used in primary care and hospital care. TLK 10 remains in use from 1996. The use of healthcare coding and classification systems are managed in Lithuania by the Ministry of Health and the Lithuanian health information centre.

Currently, there is no common EHR architecture available on a regional or national level in Lithuania. The initiatives related to the development of the interoperability standards for HER established were included in the eHealth Strategy policy. In this stage, no form of conformity testing or accreditation scheme for eHealth systems and applications is available in Lithuania.

6 eHealth RTD Status

6.1 General Information on RTD Structure

The main actors active in the process of RTD policy setting in Lithuania include:

- The Science Council of Lithuania
- The State Research and Higher Education Fund
- The Lithuanian Academy of Sciences [8]
- The Lithuanian State Science and Studies Foundation [16]

At present the system of research and higher education is based on the Law on Research and Higher Education. Other legislative acts mainly deal with a regulation of state research sector in Lithuania: legal status of research organisations, the State Research and Higher Education Fund, state research programs, etc. State research institutes and universities are autonomous units, self-governing according to their statutes. At present in Lithuania there are 10 universities, and 29 state research institutes under the umbrella of the Association of the Research Institutes. During the reform; however, it is planned to change this fragmented structure by decreasing number of such institutes [2], [15].

The Ministry of Education and Science in collaboration with the Science Council of Lithuania is responsible for the State RTD policy and for the distribution of the state budget subsidies. The Science Council of Lithuania is the main adviser of the Seimas (Parliament) and the Government of the Republic of Lithuania on the issues of RTD and higher education. The Science Council is formed and acts according to the regulations approved by Seimas. Another advisory body on science policy is Lithuanian Academy of Sciences. The Academy of Sciences is an autonomous, state-subsidised organisation bringing together the most distinguished Lithuanian scientists as well as foreign scholars, whose activities are related to Lithuania. The State Research and Higher Education Fund are responsible for the distribution of the state research and education funds on competitive basis [2], [15].

While the Ministry of Education and Science provides by far the biggest share of the State RTD funding, some other ministries are also playing a very important role in the RTD structure. The Ministry of Economics supports the research in industry directed to fulfil the needs of the Lithuanian enterprises. It has a programme for small and medium enterprises working in the field of high technologies. It also co-operates with the State Research and Higher Education Fund while providing the additional state support for research funded by industry. The Law on Science and Technology Parks is foreseen in the new Government's Programme. At the moment two Science and Technology Parks are already functioning: at the Semiconductor Physics Institute in Vilnius and at the Kaunas Technology University. The new law, however, will provide a legal basis for the new Science and Technology Parks [2], [15].

Main groups directly involved in RTD activities in Lithuania encompass organisation of Higher Education sector: 10 Universities, 5 Academies, 7 State Colleges, 9 Non-state Colleges, 5 State Research Establishments and institutions of governmental sector: 26 State Research Institutes, 18 State Research Institutions and 25 other entities. Business enterprises sector involved in RTD domain include about 60 entities [15].

The priorities of national RTD policy are as follows: internationally recognized research in various fields of science, involvement in the international research programmes, applied research vitally important for the Lithuanian society and the development of economy, fundamental and applied research in the field of the Lithuanian language, culture and history. More detailed priorities are being currently discussed. Biotechnology, material science, nanotechnology, information technologies could be named as future priorities of the Lithuanian RTD system [15].

6.2 Research Programmes

The priorities for RTD in Lithuania accepted by the Government in July 2002 are as follows:

- Research to ensure quality of life of people: genomics and biotechnology for health and agriculture, qualitative, safe and ecological food technologies, changes of ecosystems and climate.
- Research to promote a knowledge-based society: information society technologies, citizens and governance in a knowledge-based society, protection of national identity under globalisation.
- Research to create nanotechnologies: nanosciences, nanotechnologies, development of multifunctional nanostructure-based materials.
- R&D activities on nuclear safety of Ignalina nuclear power station in the stages of its operation and closure, and management of radioactive waste: nuclear safety, radioactive waste management.
- R&D to increase international competitiveness of Lithuanian industries: development of biotechnologies, mechatronics, lasers, information and other high technologies.

In the end of 2003, the Government of the Republic of Lithuania approved the Programme for High Technology Development. In the same time, the document “Lithuanian Long Term Science, Research and Development Strategy (until 2015)” was prepared and approved by the Government. It indicated the systemic approach towards RTD as an integral part of the national competitiveness strategy. The development of a knowledge economy and knowledge society is a key item in the political priorities list.

The priorities of research programmes which could be relevant to eHealth field include: ICT applications, bioinformatics, genomics, proteomics, new materials (incl. biomaterials) [15]. There is no further information on the programmes.

6.3 National RTD Funding

Two RTD funding organisations were identified in Lithuania: the State Research and Higher Education Fund and The Lithuanian State Science and Studies Foundation [15], [16]. The level of annual funding is not defined separately for ehealth related activities.

A considerable part of the public funding for RTD is directed to public research and higher education institution ("institution-driven" mechanism). The project-based mechanism of funding is available for the research teams and institutions on the basis of the competitiveness of the submitted proposals. This funding is distributed by the Lithuanian Science and Study Foundation. The main types of the projects funded in this way include institutional projects, independent science group projects and joint (business and RTD sector) projects.
The Ministry of Economy is also active in distribution of the funding for RTD activities, mainly in relation to industry-relevant research.

6.4 Technology Transfer and Innovation Support

The aim of the Telemedicine Centre of Kaunas University of Medicine is to initiate, form and introduce the politics of telemedicine development in the University and in the country and to prepare recommendations for health care institutions and government institutions.[14] EHealth related technology transfer and innovation is supported by international cooperation of the Telemedicine Centre of Kaunas University of Medicine and activities of Telematics Scientific Laboratory (TSL) at Kaunas University of Technology.[14][15] Actions supporting ehealth-related innovation on national level include conferences, seminars, and information and communication activities.[7]

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