Health and eHealth in the EU-10

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„Europe Towards eServices, Innovation and Growth" panels

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The Structure of the Presentation

1. Health care developments in the EU-10: factors, challenges and reforms
2. eHealth in the EU-10: trends, drivers and barriers
3. eHealth's potential contribution to health care trends in the EU-10

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I. Health Care Developments in the EU-10: Factors, Challenges and Reforms

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Factors affecting health care developments

1. **Exogenous factors** determined by demographic trends (aging population and shifting age composition, low fertility and high death rates), rising health care costs
2. **Transition related legacies** with worsening health care indicators, difficulties with revenue collection, incomplete ownership changes
3. **Structural distortions** including unfavourable share of preventive and curative health, hospitalisation versus out-patient treatment, significant gap between the supply of and demand for health care services, significant explosion of pharmaceuticals expenditures
4. **Sustainability of financing model** with expenditures financed mainly from publicly run social security funds, with low private insurance and formal contribution of the private sector (co-payment)
5. **Institutional distortions** with overlaping institutional responsibilities, principal-agent problems, institutional developments determined by financing constraints
6. **Ownership problems** with institutions mainly in public ownership with some increase in the role of the private sector, even in certain basic services (dental services, home doctor systems, pharmacies)
7. **Challenges** affecting the development of the health care sector

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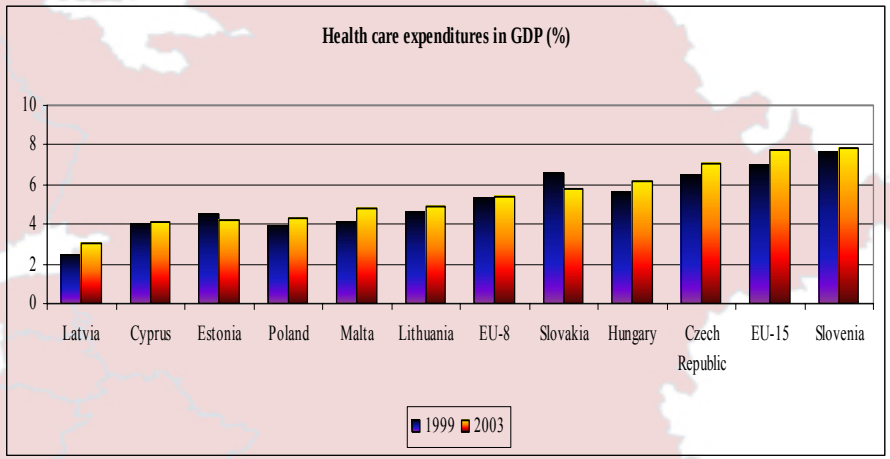
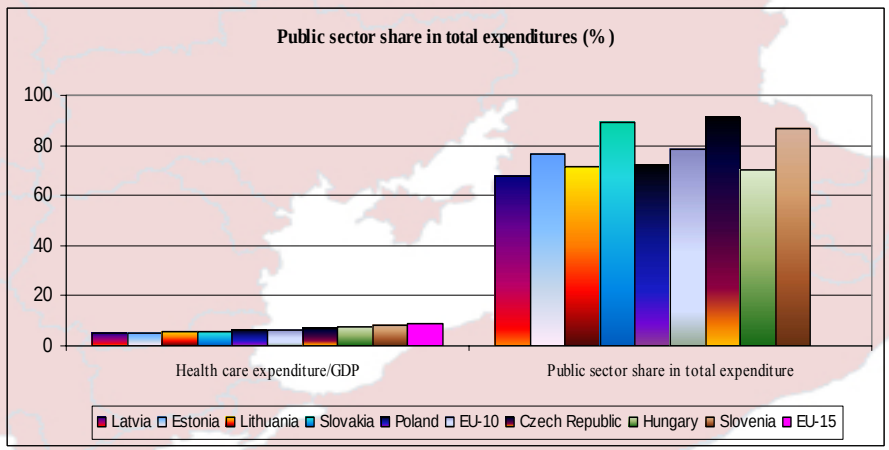
Rising but low health care expenditures

- Lower health care expenditures per capita and in % of GDP than in EU-15: in 2002 PPS adjusted per capita health care spending was 1891 € in the EU-15 and 624 € in the EU-10
- Drastic decline in health care expenditures in the EU-8 during the 1990s, followed by their gradual increase in recent years
- Expenditures are insufficient and provided in a distroted structure to cover rising costs → declining quality of services
- Low share of private sector involvement, only through informal channels: 80% of expenditures is public in the EU-10





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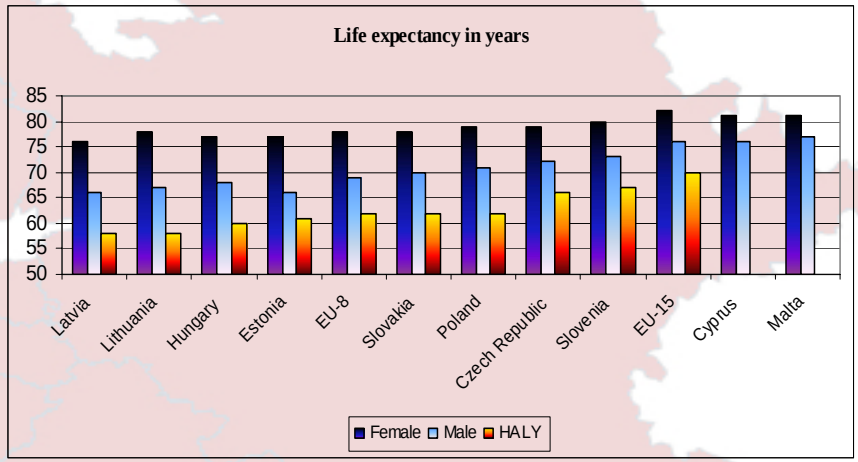
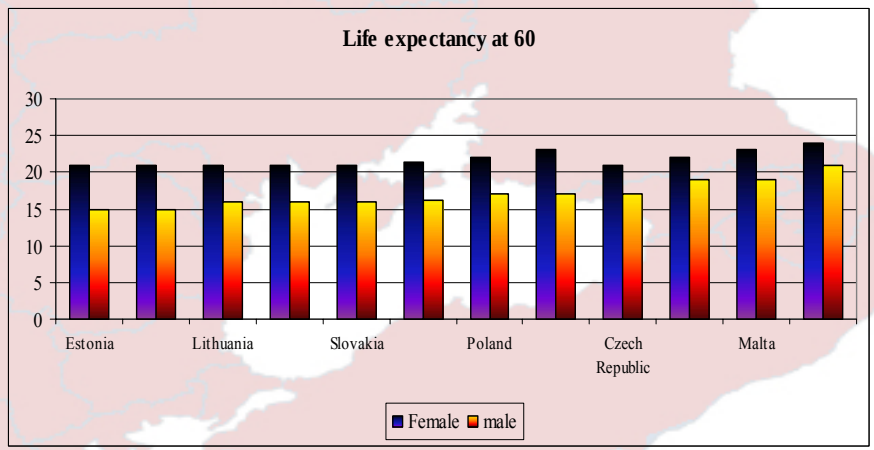
Lower life expectancy

- Lower life expectancy: in Slovenia, Czech Republic and island countries is by 1-4 years lower than in the EU-15, in the Baltic States and Hungary by 6-11
- The gap is even bigger in case of health adjusted life expectancy indicator: the difference in average is almost 11 years (!) with Latvia lagging behind by 13 years
- Gaps are higher among the male and female population in the EU-10 than in the EU-15





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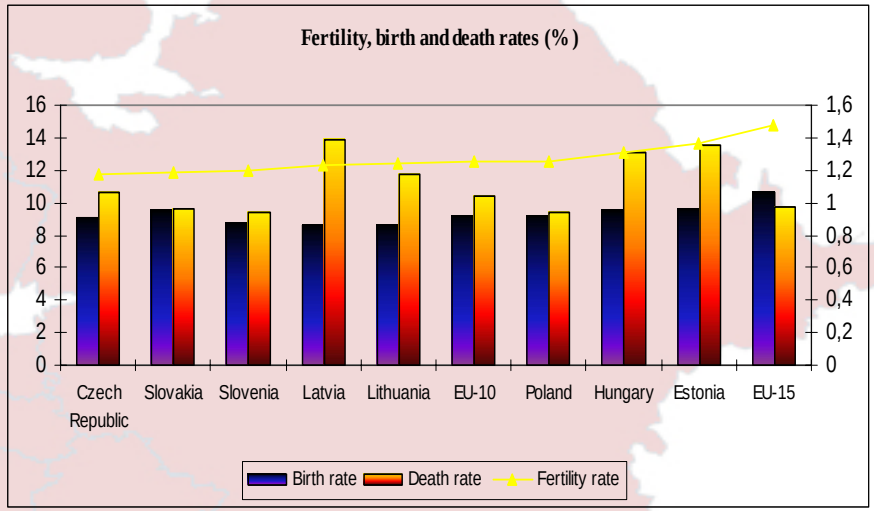
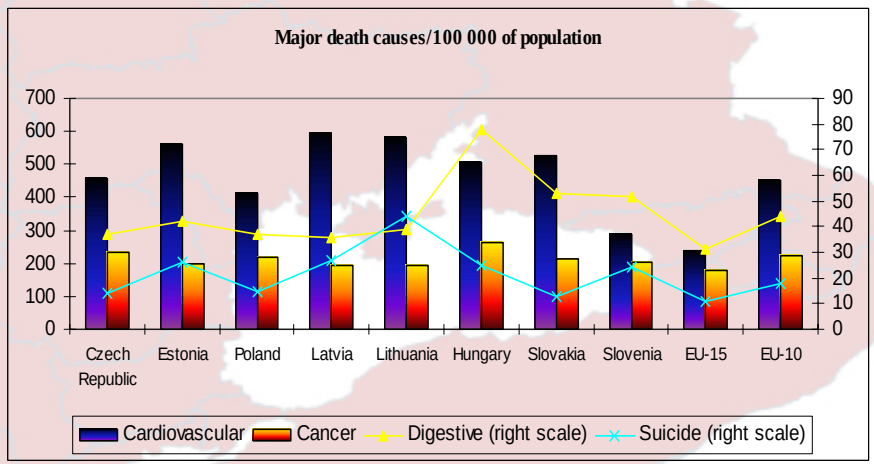
Higher and typical death causes

- With the exception of Cyprus, Malta and Slovenia population declines or stagnates
- Causes: higher mortality rate, emigration (net migration has a positive balance only in Hungary and Slovenia) and lower fertility rate, which is above the 1.48 average of the EU-15 only in Cyprus and Malta
- Exceptionally high death rates from cardiovascular diseases, cancer, digestive system and suicide
- The death rate of middle age male population is 2.5 times higher in EU-10 than in EU-15
- 25% of the gap in death rates is caused by the inappropriate level of health care services (higher incidence of cancer and infant mortality among others)





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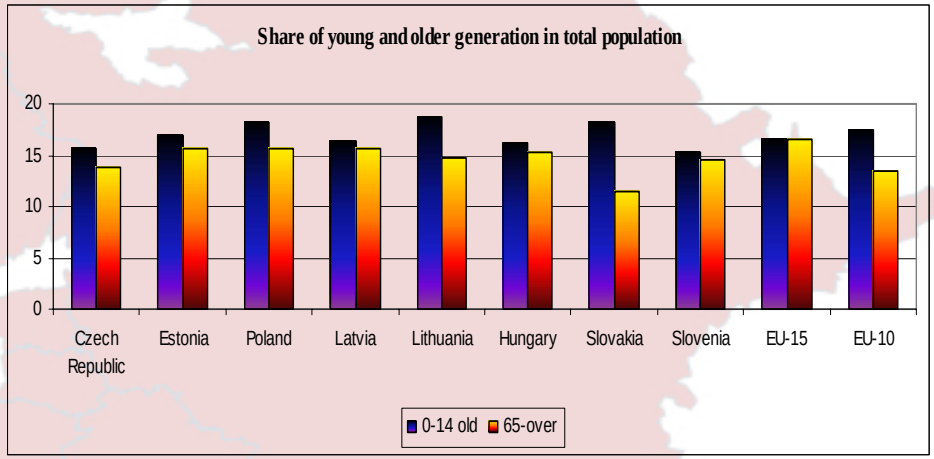
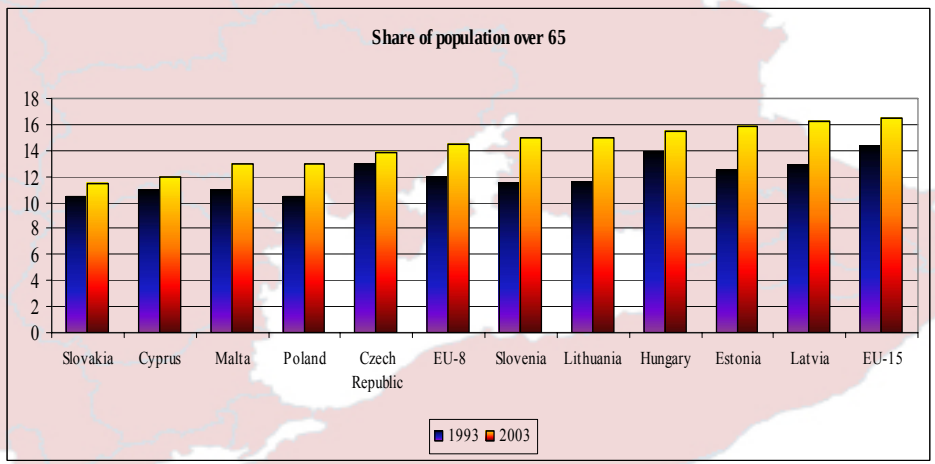
Aging population

- With some delays compared to EU-15 population has been aging also in EU-10
- The demographic situation is still slightly better in EU-10 as younger generation's share is higher and older lower than in EU-15.
- But aging is present and the share of population over 65 grew faster in recent decade in the EU-10 than in the EU-15
- Gaps are due to the time factor, lower life expectancy and HALY indicator and quality of health care services
- As a result: there is an increasing pressure from aging on health care and pension system





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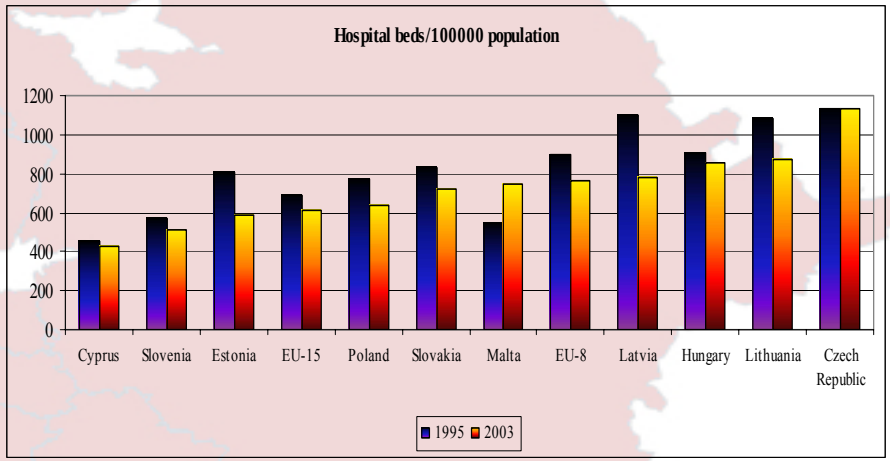
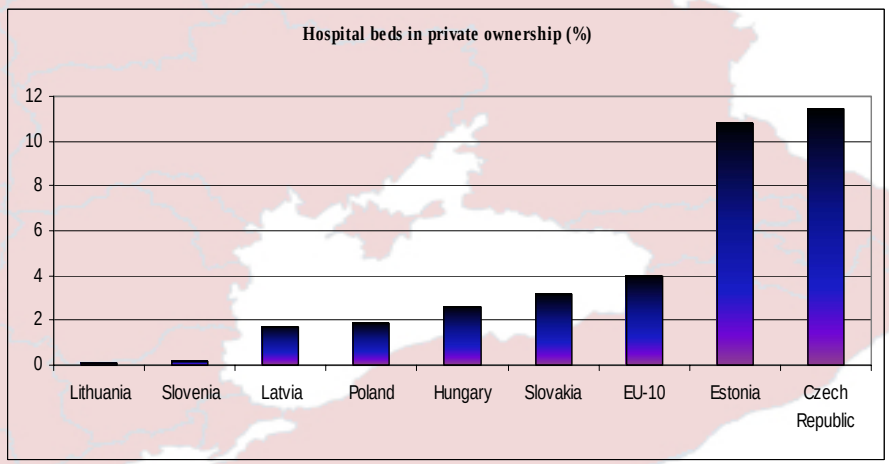
Structural problems in hospitalisation

- Institution centred financing supports bigger units, hospitals which leads to higher number of hospital beds in the EU-10 than EU-15
- Average number of days spent in hospital per patient was 6,7 in EU-15 and 7.9 in EU-10
- Sector financing supports longer treatments and lower efficiency of treatments
- Private sector's share in provision of hospital beds and related services is very low and limited to certain special health care units





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Reforms in the Health Care Sector of the EU-10

1. Privatisation of certain elements of the health care sector with some basic and mainly supplementary health care services
2. Institutional rationalisation to streamline the health care sector and reduce the institutional similarities
3. Reforming the contribution system: reducing the health care insurance fees, modifying the contribution of employees and employers, etc.
4. Measures for cost containement and reduction of overdemand for health care services and pharmaceutical consumption
5. Creating a multiple insurance model for financing expenditures and selecting from the service providers

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Major Challenges for Health Care in EU-10

1. **Cost containment** to bridge the gaps between rising costs and low, sometimes declining (in relative terms) health care expenditures
2. **Improving health care indicators** especially life expectancy and HALY, death and fertility rates, major death causes and diseases
3. **Reducing the gaps in the access to health care services** created by income, regional and health problem related divides
4. **Changing the financing structure** from the present centralised insurance models towards more decentralised ones, from the informal to formal contribution of the private sector
5. **Increasing the role of private sector** both in the provision of services and in the direct financing of health care expenditures
6. **Rationalising the existing institutional structures** including the reduction in the mismatch between supplied and demanded health care services, changing the preference for hospitalisation vs. out-patient treatments or in the relative weight of preventive and curative treatments, etc.
7. **Applying the possibilities offered by eHealth,** which could contribute to health care refroms and developments as shown by the next three presentations

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II. eHealth in the EU-10: Trends, Drivers and Barriers

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Evolution of eHealth in the EU-10

The selective review is based on the draft reports of the „**Next steps in developing Information Society Services in the NMS: The cases of eGovernment and eHealth”** project run by ICEG European Center

1. The scope of eHealth services remains below their level in the EU-15
2. eHealth developments started with considerable delay due to general problems of ICT diffusion and health care financing
3. This is reflected in eHealth policies, which have only recently been receiving increased attention from policy makers
4. The resources and funding of eHealth remain generally limited: public health funds are generally short and private ones are constrained by low access to these services
5. Recently more emphasis from government policies on eHealth linked to institutional (health sector related ones), legal and regulatory, fiscal and financial, as well as infrastructure and technology measures
6. Alignment of domestic policies and laws with EU guidelines and emerging opportunity to finance eHealth related expenditures from Structural Funds

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eHealth Services: Unbalanced Spread

- The number and scope of health care services available online is still below EU-15
- The number of services offered has been however increasing both due to public and private sector initiatives
- Less capital-intensive and easier accessible services are the first in the range of online accessibility
- Registration, data collection is more advanced, while communication between doctors and patients, use of ICT tools in monitoring, prevention is less developed

Czech Republic: Availability of eServices

Sophistication level reached is divided to 4 stages.

Stage 1 - Information: online information about public services

Stage 2 - Interaction: downloading of forms

Stage 3 - Two-way interaction: processing of forms, including authentication

Stage 4 - Transaction: full case handling, decision and delivery (payment)

1. Medical costs (reimbursement or direct settlement)

Sophistication stage: 3-4/4 (depending on the insurance company)

Description: Health insurance is compulsory in the Czech Republic and is administered by public health

2. Health related services (interactive advice on the availability of services in different hospitals; appointments for hospitals)

Sophistication stage: 1/4

Description: Information only. The degree of sophistication of web sites of the Czech hospitals varies tremendously

3. **Electronic management of personal health information**

Responsibility: Central Government, Ministry of Health, State-owned Insurance Companies

Sophistication stage: ¾

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eHealth Information System and Developments

Countries generally don't have an integrated and functioning health information system. But several components are in place for some countries:

- information systems of hospitals, general practitioners, emergency care institutions and pharmacies,
- the information system of the Health Insurance Funds,
- different registers and databases

The task is to bring them together and should systematically exchange information

Estonia : National Health Information System (NHIS)

The purpose of the project is the shift from institution-centred to patient-centered health information system available across the country: a nationwide framework (database) will be developed that facilitates the exchange of diffuse health information, currently available only in local databases that often are don't communicate. The fully functional NHIS should be implemented by the end of 2008 including Digital Health Record, containing critical information about all individuals in Estonia; digital appointment booking system; digital prescription system; digital medical image database; digital blood-bank database; national health registries; national medical informatics' standards.

Slovakia: Medicine Automatized System

The Slovak Pharmaceutical Association has launched the Medicine Automatized System. The System will be accessible by physicians and pharmacist at internet. It will contain all important data about medications registered in the Slovak Republic. Currently is ready only paper version of Medication Booklet.

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eHealth Policies: Gradual Awakening

There has been a gradual evolution of policies

- Initially embedded in the health sector policies
- In recent 2-3 years they have been included in eHealth programs and in general Information Society Development programs
- New eHealth programs from 2004-2005 partly financed from the Operational Programmes and use of EU Structural Funds
- Recent goals: access, infrastructure development, funding, establishment of eHealth services and information exchange

Targets of the eHealth2010 Information Technology Implementation Strategy in the Health Care System of Slovenia:

• set up a national information portal to enable medical professionals and users access to patient data,

• develop information and communication technologies tools which will assure strengthening or early warning, detection, and surveillance of health threats and workplace health risks and

• provide online health services such as teleconsultation (e. g. second medical opinion), e-prescription, e-referral, e-documents, e-forms, telecare, by the end of 2008

Targets of the „ePoland - The Strategy on the Development of the Information Society in Poland for the years 2004-2006":

to make it easier for citizens to access information about health on the Internet

to improve the efficiency of the healthcare system by providing electronic workflow of documents;

introduce a medical information system to allow for the continuous analysis of demand for health services in Poland

Major Obstacles for Using eHealth Services

There are several obstacles hindering the more widespread use of eHealth

- General problems of IST diffusion: penetration, digital divide, affordability and access
- Lack of ICT skills in case of doctors, nurses and other service providers
- Lack of awareness about the availability of services
- Security issues regarding data privacy and confidentiality
- Accessibility of online information for persons with disabilities
- High costs of the modern health care services and the lack of efficient technological solutions, which would make online communication among patients and doctors quick and easy
- Slow progress with health care reforms
- More attention would be needed from policy makers for eHealth

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III. eHealth's Potential Contribution to Health Care Developments in the EU-10

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eHealth Contribution to Health Sector Developments in the EU-10

- eHealth developments may reduce the cost explosion in the health care sector and may contain the increasing pressure between spending needs and available sources
- eHealth may help in better monitoring of excessive use of certain services, medicines, which may also stimulate their more efficient use and reduce costs
- eHealth applications may help in reducing the death rates linked to special illnesses characteristic for the EU-10. Better monitoring, patient control, doctor-patient links could reduce cardiovascular and cancer related death rates in the EU-10
- eHealth may also contribute to institutional decentralisation: the institutional structure is very centralised (preference to hospitals, bigger health care units, etc.) and the technological availability may accelerate decentralisation, may help to develop more competition and smaller health care providers
- eHealth may in principle reduce the divide in terms of access: there are increasing differences in health care indicators between the more and less affluent and prospering regions. The wider use of eHealth tools and applications may help in reducing these gaps

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