



European Union eHealth strategy in support of Member State health policy priorities

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European diversity and the European Social Model - health policy context -



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European diversity

- > 20 official *languages*
- Countries with 2, 3 & 4 official languages (BE, CH, FIN, IRL; unofficially many more languages: IT, ES, SK, etc.)
- 3 *alphabets* (Ελληνικού, Кирилица, Latin)
- National (UK: 4 countries) or regional health systems (ES 17, IT 22)
- Sometimes *responsibilities* for healthcare *shared* by central/provincial/local governments (DE, Northern Europe, ...)
- *Bismarck* (public insurance), *Beverage* (tax based), mixed (public-private) health *financing systems*



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European unity

Common values of European health systems:

- § *Universality* : everyone
- § *Good quality* : everywhere
- § *Equity* : according to needs, no discrimination
- § *Solidarity* : insurance fees/taxes according to financial ability to contribute

A set of overarching values shared across Europe – European Social Model



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European (health) policies

- Assure a *single market* for products *and* services, *but* health services excluded
- Full *mobility* across European Union (EU) member states (MSs) for all (supply, demand):
 - § Students, workers, *professionals* (including MDs, pharmacists, nurses)
 - § People, also as *patients* (>200m/y)
 - § *Retired* people (chronic, social care needs)
 - § Already close cooperation in some *cross-border* regions
 - § Medical tourism (e.g. dental treatment)



EU and MSs: sharing of health services responsibilities

- EU Treaty stipulates: delivery of *healthcare* services
- § *sole responsibility of each member state*
- but various exceptions:
- § health services may be *bought in another MS*
 - § *European Court of Justice*: all persons have certain rights to *access healthcare services in another state*
 - § *European Court of Human Rights*: European Convention on *Human Rights assures confidentiality* of (electronic) medical records in any member state
 - § EU ensures high level of *health protection* in all policies



Towards a European eHealth space

- Ø Closer **cooperation** among MSs and support by the EU are required to
 - § sustain the European Social Model
 - § meet citizens' demands for better health services and mobility
- Ø **eHealth**, i.e. *ICT-supported health services and solutions*, will strongly contribute to the pan-European health services vision
- Ø The European Commission is meeting these challenges and strongly supports development of a **unified European health information space**



eHealth in the Union European Commission (EC) and member state (MS) activities



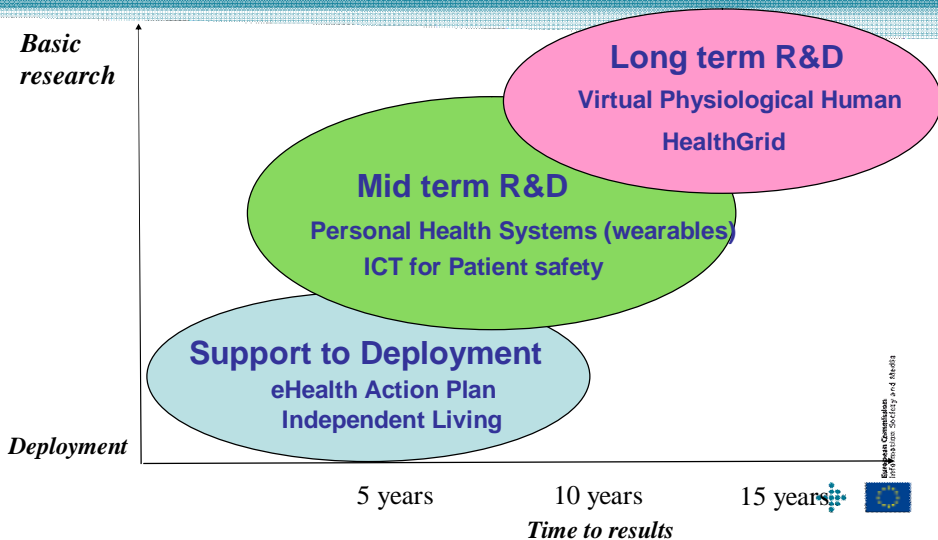
European Commission ICT for Health Unit

Vision: eHealth enabled citizen-centred services

- **Research & Development activities**
 - § Research Framework Programmes (since 1989)
 - § To date > 450 projects, > €1 billion
 - § In cooperation with health services, industry, universities
- **Policy instruments**
 - § Communications, Recommendations to member states, working with stakeholders, etc.
 - § Strategy studies, road maps, evidence
- **Support to deployment**
 - § Market validation and implementation
 - § Competitiveness and Innovation Programme: fostering cooperation among MSs



ICT for Health – Overall Strategy



R&D support



ICT for Health in Framework Programme 7 (FP7) 2007-2013



§ Personal health systems

- €72m in 2007 (€63m in 2009)
- Example: *Heartcycle* (www.heartcycle.eu)



§ Patient safety - avoiding medical errors

- €30m in 2007 (€30m in 2009)
- Example: *DebugIT* (www.debugIT.eu)

§ Predictive Medicine – Virtual Human

- €72m in 2007 (€68m in 2009)
- Modelling/simulation of diseases (www.vphop.eu)



EC eHealth policy agenda



EC eHealth policy instruments

- **Communications (policy statements)**
 - § EU **eHealth Action Plan**, 2004; in preparation: Telemedicine services
- **Recommendations**
 - § Recommendation on **cross-border interoperability of EHR systems**, 2008
- **Support for market development and deployment**
 - § **Lead Market Initiative**, 2008 (eHealth market support)
 - § Competitiveness & Innovation Programme-Policy Support, 2007-2011
- **Policy studies: strategies, market research, assessment, business models**
- **Stakeholder involvement**
 - § Ministries of Health (**i2010 Subgroup on eHealth**)
 - § Stakeholder groups (patients, industry)
- **Annual events:**
 - § eHealth High Level Ministerial conferences
 - § World of Health IT (WHIT) conferences and exhibitions



Communication: European eHealth Action Plan (2004-2010)

- EC called for commitment of MSs to work together to implement eHealth & develop:
 - § National/regional strategies/roadmaps (MS)
 - § Common approaches for patient **identifier** (EC+MS)
 - § **Interoperability** standards for EHR systems and messaging (EC+MS)
 - § Boosting **investments** in eHealth (MS)
 - § **Certification** and conformity testing (EC+MS)
 - § Deployment of health information **networks** (MS)
 - § **Legal** framework, accreditation (EC+MS)



Emphasis on interoperability in 2008 - I

- EC **Recommendation** on (cross border) EHR systems interoperability
- **Large Scale Pilot** (epSOS) to deploy 2 services across borders: patient summary & ePrescription
- Projects & workshops on **semantic** and technical interoperability
 - § **SemanticHEALTH**: R&D and deployment roadmap for semantic interoperability in Europe
 - § RIDE
- Upcoming calls for new proposals:
 - § EHR certification; conformance testing
 - § Personal Health Systems interoperability with EHR systems



www.SemanticHEALTH.org



Emphasis on interoperability in 2008 - II

Mandate to three European Standards Organisations (ESOs): CEN, CENELEC, ETSI to focus on

- 1) Patient and health practitioner identifiers
- 2) Patient summary
- 3) Emergency data set

thereby

§ analysing health sector needs (Phase I)

- Open consultation of Phase I Draft Report: IHIC, 9-10 October 2008, Crete, and WHIT, 7 November 2008, Copenhagen
- Final report: December 2008

§ further developing standards (Phase II)

- Phase II 2009-2011: realise work programme

www.ehealth-interop.nen.nl



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EC Recommendation on cross border interoperability of EHR systems (2008)

- **Aim:** guidelines for national and cross-border interoperability of EHR systems
- **Scope:** incl. also patient summaries, emergency data sets, medication records / ePrescription
- **Actions** at four levels:
 - § (1) political
 - § (2) organisational
 - § (3) technical
 - § (4) semantic
- **Monitoring, evaluation & awareness rising**
- **Compliance with national & EU laws**



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Selected technical and semantic level actions proposed

- Consider the establishment of competence centres for *multilingual and multicultural adaptation* of international classifications and terminologies
- Develop necessary additional standards at the *global level*
- *Agree on standards* for health information representation for *particular use cases*
- Development of *tools* for incorporating the semantic content into *practical applications*
- Sound socio-economic *evaluation*



Support for deployment

Competitiveness and Innovation Programme –
Policy Support (CIP-PSP)



EC and member states cooperation in eHealth deployment

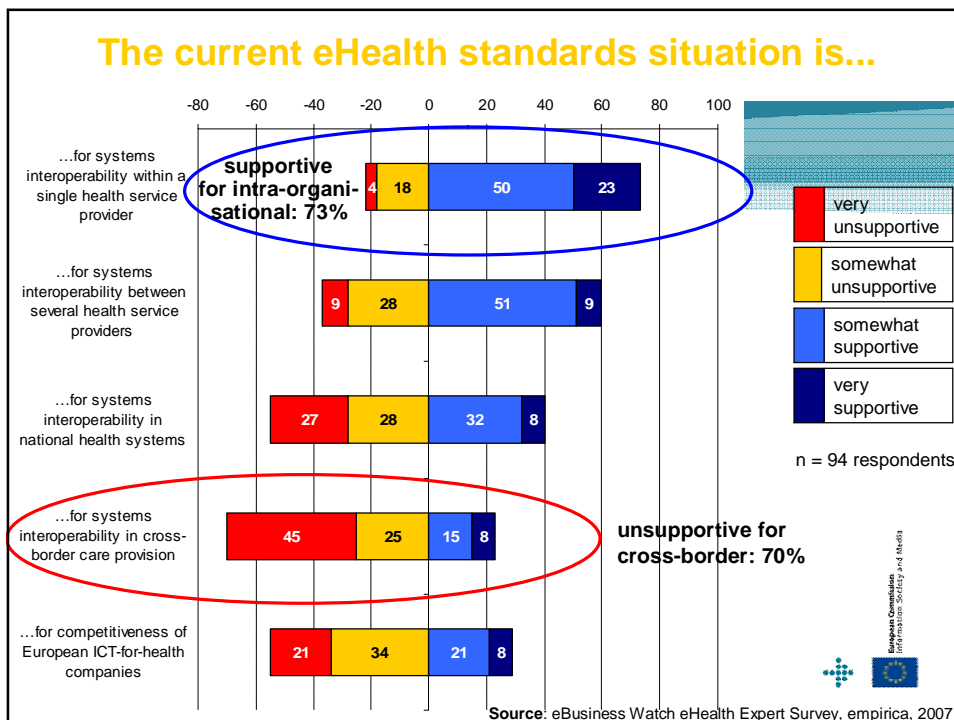
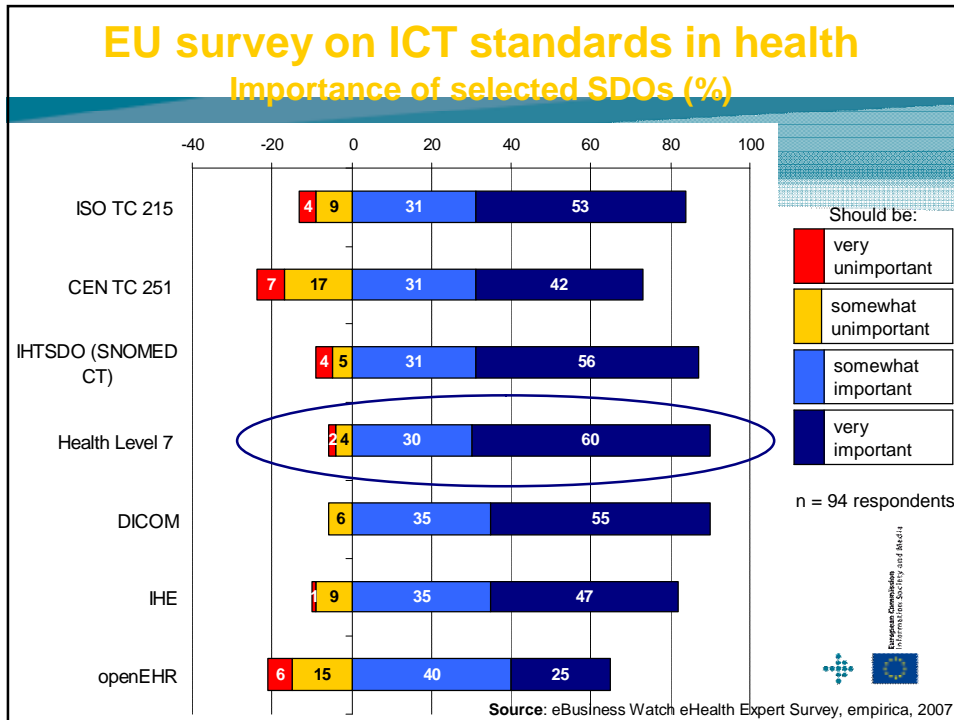
- Large Scale Pilot on cross border interoperability (**epSOS** = Smart Open Services for European patients)
 - § 12 EU member states, €22m, 2008-2011
 - § Cross-border services – safe treatment for citizens when in another MS
 - *European Patient Summary* (emergency treatment, unplanned care)
 - *ePrescription* across the EU (continuity of care)
- EU Interoperability Network **CALLIOPE**
 - § *Community building*, exchange of experience
 - § *All* member states



In search of evidence

Monitoring, market research,
socio-economic assessment





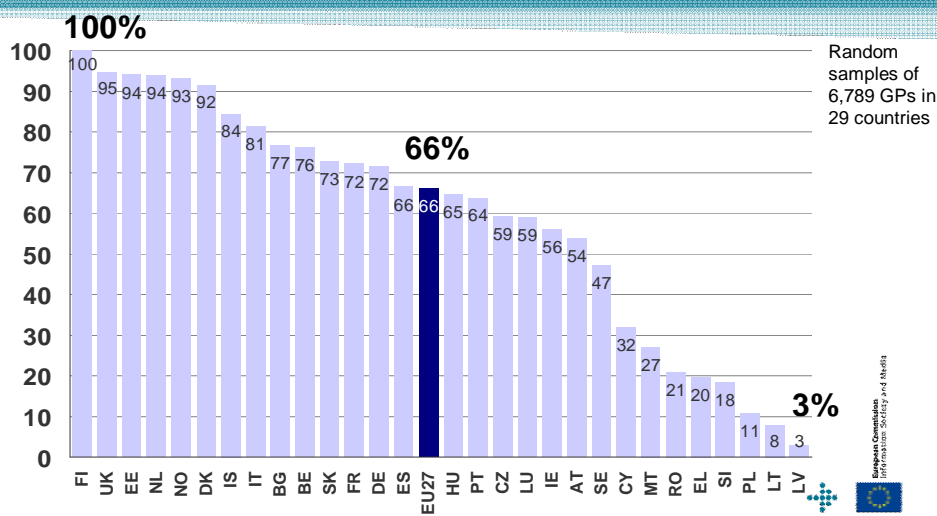
EU policy implications

- Promote *EU-wide agreement* on priority standards and their uptake, harmonisation and further development of necessary standards
- Strengthen *collaboration* initiative of ISO, CEN and HL7
- Commitment of member states to *global* eHealth standardisation
- Stronger involvement of *industry and user groups*

e-Business
Watch @

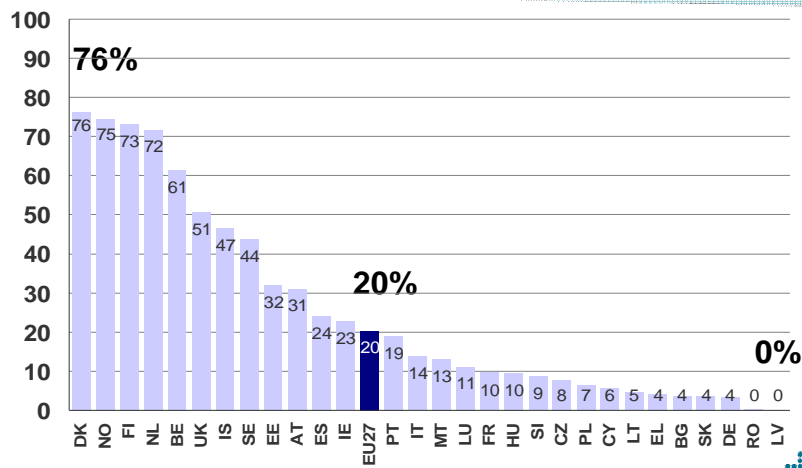


EU GPs using a computer during consultation, in % (EC Study 2007)



Source: empirica: ICT and eHealth use among GPs in Europe 2007, Bonn April 2008

EU GPs data exchange with hospitals

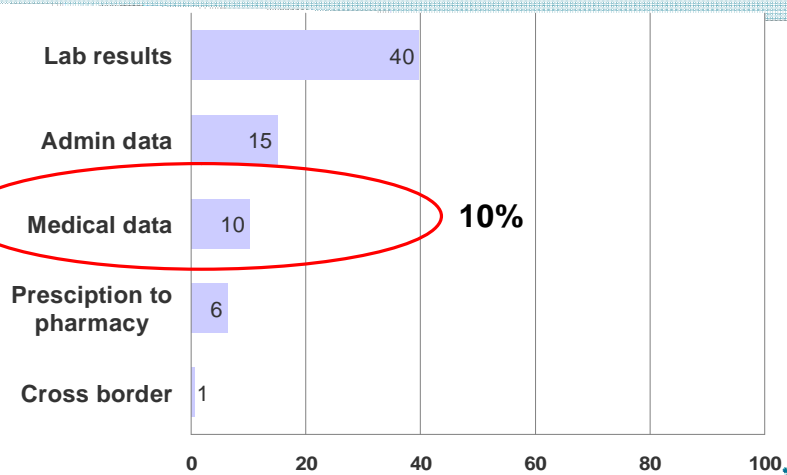


Source: empirica: ICT and eHealth use among GPs in Europe 2007, Bonn April 2008

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GPs: electronic exchange of patient data with other actors

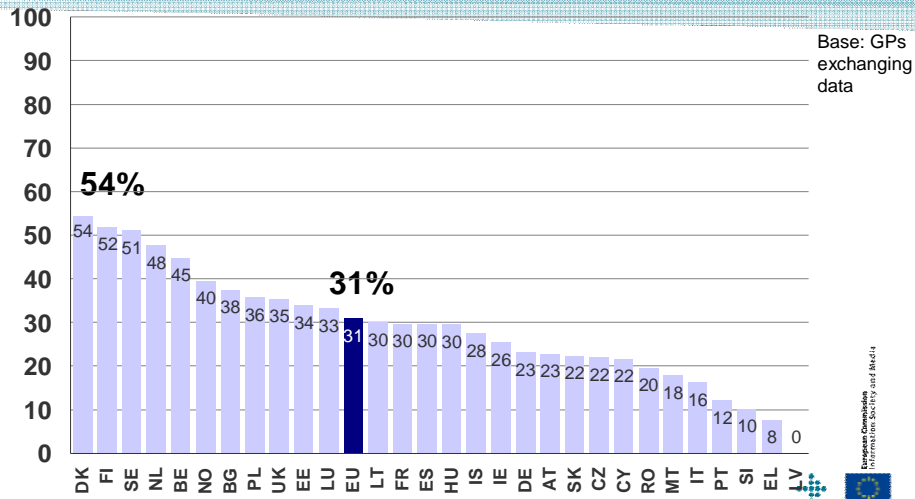


Source: empirica: ICT and eHealth use among GPs in Europe 2007, Bonn April 2008

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GPs: interoperability problems



Source: empirica: ICT and eHealth use among GPs in Europe 2007, Bonn April 2008

Socio-economic assessment: eHealth is worth it

- **National & Regional Health Information Networks** improve quality, efficiency, and realise estimated net benefits of €80m/y in Denmark (Medcom) and €50m/y in Czech republic (IZIP)
- **ePrescription** improves patient safety, net benefits €70m/y in Sweden
- **Direct online information services** such as NHS Direct Online, empower patients, avoid unnecessary hospitalisation, net benefits €100m/y in UK

www.eHealth-impact.org www.EHR-impact.eu www.good-ehealth.org



Conclusions



Conclusions and some lessons learned - I

- **The European Social Model & citizen mobility necessitate faster progress in intra and cross health system interoperability (IOp)**
- **Individual health service providers often have little interest to invest in “external” IOp - i.e., [public] incentives may be needed**
- **Benefits may be high for patients, Public Health, clinical research, third party payers, health system politics**
- **Slow progress in IOp is a key barrier to realising these benefits**
- **To become more successful, eHealth strategies must be integrated into and support health policies**



Conclusions and some lessons learned - II

- Based on 20 years of successful R&D support and concrete eHealth roadmaps, both the *European Commission* and *Union member states* provide strong *leadership* and commitment to realise **pan-European (basic) IOp**
- Building on global leadership of European health service providers in ICT use, a strategy focusing on **few key pan-European applications** (patient ID, basic patient summary, medication record/ ePrescribing) is pursued
- Patient safety, quality and access are key policy goals
- eHealth is not a panacea – key is optimal redeployment of freed resources, *not* cost savings



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Further information:

European Commission

http://europa.eu.int/information_society/activities/health/index_en.htm

empirica

http://www.empirica.biz/themen/telemedizin/projekte_en.php



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