



# Austrian eHealth Strategy & Experience

**ISSS – Local and Regional Information Society, Hradec Králové**  
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# Introduction - ELGA GmbH

- **Founded in November 2009**
- **Owners are**
  - Federal Ministry of Health
  - Main Association of Austrian Social Insurance Institutions
  - All the nine Austrian Provinces
- **Based on a national convention between the General Government and the Provinces about Organization and Financing the Austrian Health Care System**
- **CEO, CIO**
  - Dr. Susanne Herbek
  - Mag. Hubert A. Eisl
- **Staff: 18 employees**



# Health in all policies – also in ICT

- **Just as ICT has changed the world, it is changing healthcare**
- **eHealth is the use of ICT in the health sector**
  - **Subsidiary part of the medical business**
  - **Strengthens evidence-based scientific approach in medicine**
  - **Opportunity to optimize processes and results in medicine**
  - **“The more you know, the more you can do” – Changed Paradigm for healthcare providers and patients**

# What do we eHealth use for ?

- **A variety of (ideal typical) applications and requirements in the medical business:**
  - Diagnosis and therapy (e.g. laboratory, radiology, telemedicine, ambient assisted living ...)
  - Administration (e.g. invoicing, documentation ...)
  - Knowledge and information management (e.g. databases, quality register, electronic health records, eMedication ...)
- **Special Austrian eHR -  :**
  - **E**lectronic **H**ealth **R**ecord >> **eHR**
  - **E**lektronische **G**esundheits-**A**kte >> **ELGA**



# Perspectives on eHealth

- **Healthcare providers**

- availability of patient data in the diagnosis and therapy process (quality assurance)

- **Research and epidemiology**

- availability and analysis of routine data

- **Administrators and economists**

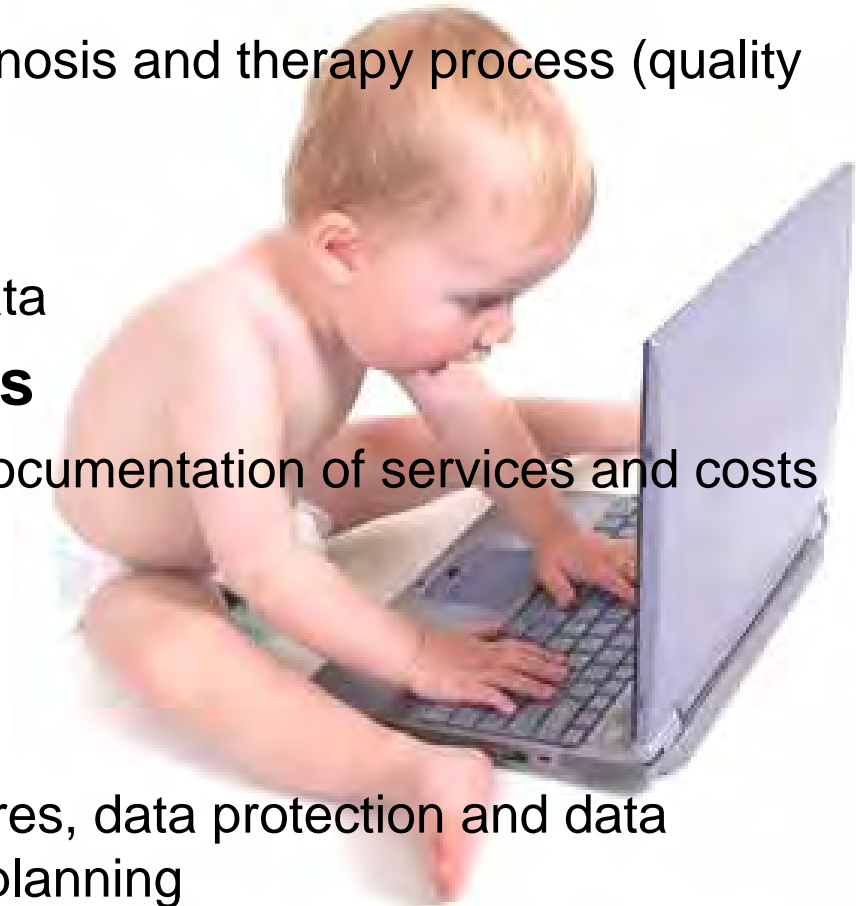
- automated processes, transparent documentation of services and costs

- **Patients**


- “the right to information”

- **Ministries of health**

- integration of diversified care structures, data protection and data security, enhanced process quality, planning



# The role of the government: **Interoperability**

- **Wide variety of IT systems (hardware and software) available on the market and among users**
- **Benefits of ICT arise not just in one place but by networking systems (keep the balance)**
- **Proprietary solutions are expensive solutions**
- **Making decisions together, not alone (integration)**
- **Using international standards, e.g.**
  - IHE – Integrating the Healthcare Enterprises
  - HL7- CDA: Health Level 7 – Clinical Document Architecture
  - Practised in 

# Tasks for the (Austrian) Government

- **Enable interoperability**
  - Standardization in **ELGA**
- **Create legal certainty**
  - Social laws for eCard & Law for **ELGA**
- **Maintain competition and product diversity (investment protection)**
  - Integrating the national networks – eCard-Net
- **Encourage and financing the roll-out of IT applications, e.g. **ELGA****

# Austrian approach incl.

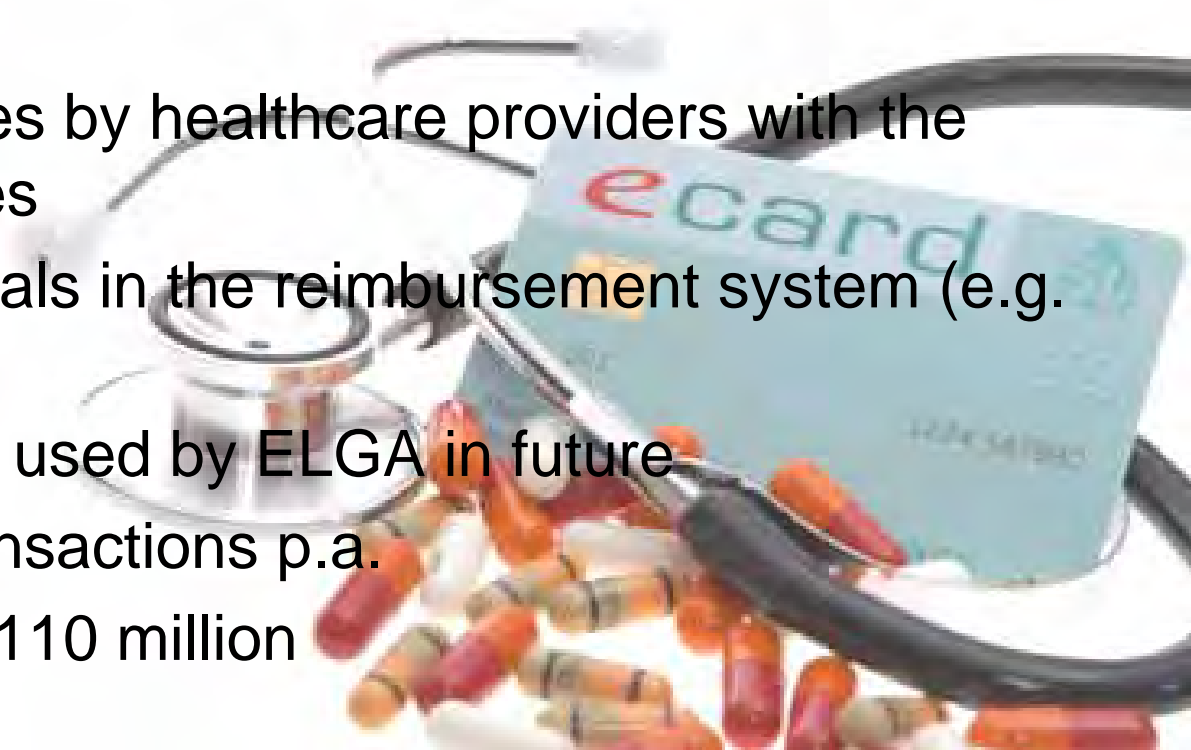
- **Key pilot projects ...**

- Diagnosis and therapy: public funding of nationwide use of modern laboratory and imaging technology (RIS, PACS) and hospital information systems
  - Administration: nationwide networking of all healthcare providers by “eCard”, investment in state-of-the-art hospital information systems
  - **Knowledge and information management: nationwide eHR (“ELGA”)**
- ... and a good basis of technological infrastructure in the healthcare system



# eCard for social health insurance

- All 8 million Austrians have been using the eCard as a key to identification at *all* healthcare providers since 2005
- eNetworking of *all* 12,000 healthcare providers (under contract)
- eBilling of *all* services by healthcare providers with the insurance companies
- eServices of approvals in the reimbursement system (e.g. medicines)
- Safe network – also used by ELGA in future
- Over 110 Million transactions p.a.
- Total investment: € 110 million



# - A national project

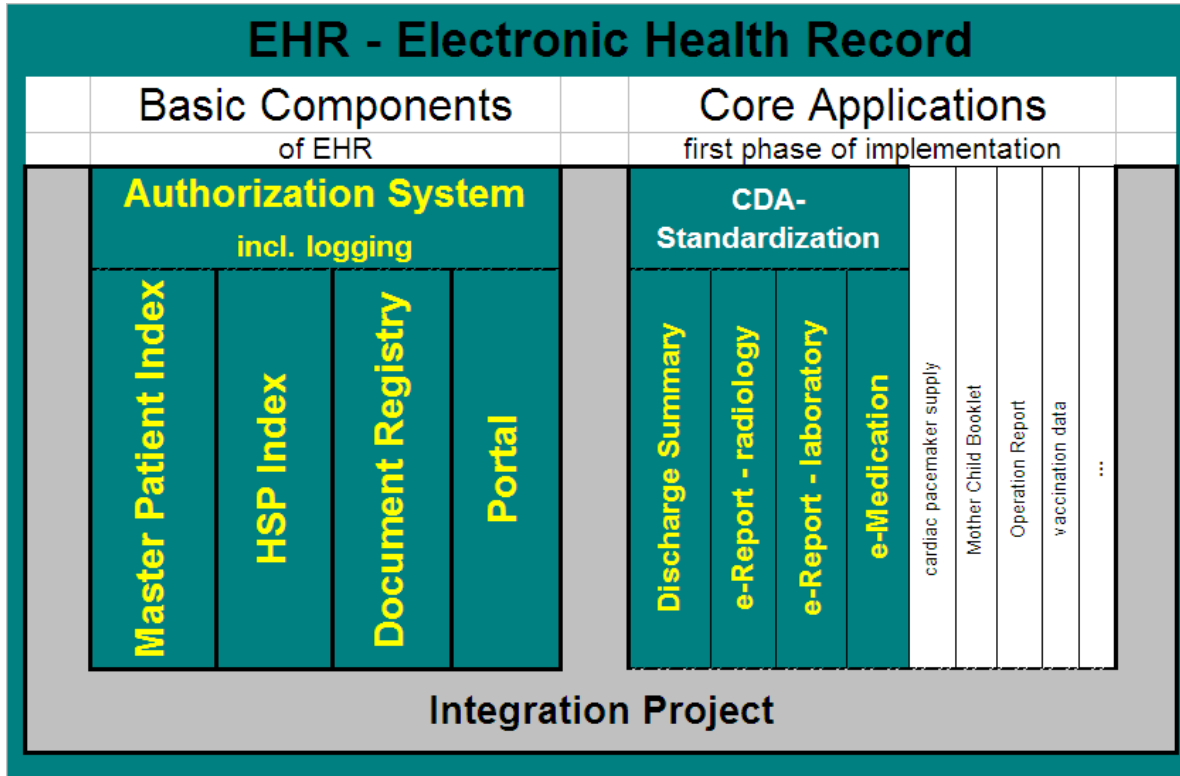
- **for *all* political system partners:**
  - 2006 Political decision to design ELGA as a public infrastructure
  - 2006-2008 Feasibility study, requirement profiles and architecture
  - 2007 Specification of technical framework standards (IHE, LOINC, HL7, DICOM) for *all* healthcare providers to safeguard investment decisions
  - **12 / 2009 ELGA Development Company – ELGA GmbH**
  - 2010 / 2011 Growing up ELGA GmbH & Start of Project
  - Provisions of an investment framework: € 30 million

# Definition - What is **ELGA** ?

- **EL**elektronische **G**esundheits-**A**kte >> **ELGA**
- **E**lectronic **H**ealth **R**ecord >> **EHR**
- **ELGA** contains relevant multimedia-based and health related data and information referring to a precisely identified person
- **Data and Information** are available independently of place and time at the place of treatment
- **For all authorized persons**
- **For the patients themselves**

# Purpose of ELGA

- **Modernization of Health Care** in Austria
- Establishment of Integrated Medical Care
- **Increase Quality and Efficiency** of the Health Care System
- Easy Access to **Personal Health for every patient**
- Connecting existing decentral storage systems („ELGA Repositories“) by a linking system („ELGA Registries“) to a national network
- **Standardization** of documenting and reporting health data by international profiles
  - IHE – Integrating the Healthcare Enterprises
  - HL7 - CDA – Clinical Document Architecture



- Master Patient Index
- Health Services Provider Index
- Document Registry
- Document Repository
- Authorization System including Logging
- ELGA Portal
- **ELGA Applications**
- Information Security Management System

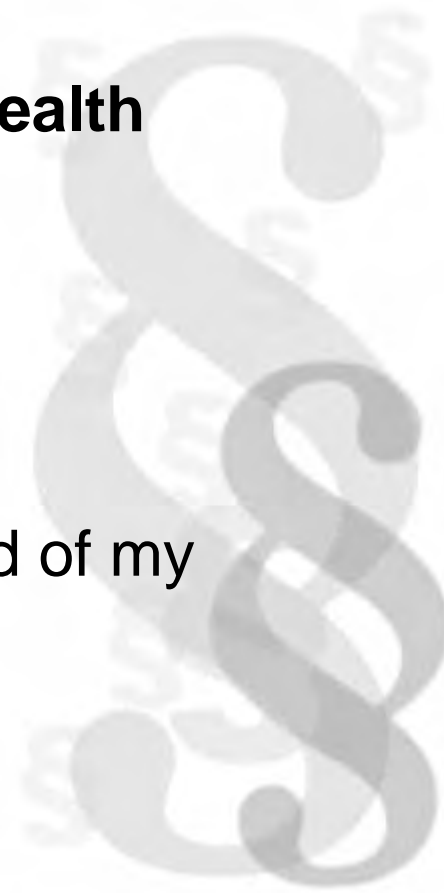
Projects	Timetable
Health Provider Index	Ready May 2011
Master Patient Index	Ready Juni 2011
Integration with Authorizing & Logging System	End of 2011
Information Security Management System (ISMS)	End of 2011
IHE-compliant Affinity Domains (Repository & Registry)	already implemented, ongoing
Pilot for e-Medication (e-Prescription & e-Dispensation) in three pilot regions	2011
Rollout ELGA (e.g. Integration of the Affinity Domains with central components)	Starting 2012
Conceptional Work for ELGA Portal	2011
Development of Documents CDA	ongoing

# Legal Framework for

- Is the protection of **sensitive personal data** inconsistent with the **benefits of data use**?
  - This is about people's rights, not the rights of IT systems
- **“Public interest”** in the use of health data (Art. 8 (4) of Directive 95/46/EC):
  - Strengthening of patients' rights, in particular rights to information
  - Improved quality of diagnostic and therapeutic decisions
  - Increase in the process quality and quality of results of health services
  - Development of integrated care and interface management in public health care

# Legal determining Factors for

- **Adoption of law to be concluded by parliament within the next months**
  - **Participation in ELGA is mandatory for health providers**
  - **Patients' rights**
    - General and partial Opt out decision
    - Access to ones own ELGA documents
    - Access to log information („Who retrieved of my documents ?“)
  - **Sanctions in case of misuse**
- **Patients' access [www.gesundheit.gv.at](http://www.gesundheit.gv.at)**





The screenshot shows the ELGA portal interface. At the top, there is a navigation bar with 'HOME', 'INHALTE A-Z', 'SERVICES', 'GESUNDHEITSSYSTEM', 'LEXIKON', and 'UBER'. The main content area is titled 'Schlaganfall' (Stroke) and includes sections for 'Gesundheitsvorsorge', 'Gesundheitsleistungen', 'Mutter & Kind', and 'Krankheiten'. The 'Schlaganfall' article is the central focus, with sub-sections for 'Basis-Info', 'Vorsorge', 'Diagnose', and 'Therapie & Rehabilitation'. The ELGA logo is prominently displayed in the top right corner of the page and is circled in red.

- Online since January 2010
- **TODAY:** general health information

- public
- quality assured
- sponsor free

- **IN FUTURE:** Portal for patients

- LogIn for personal ELGA
- Download
- Consent management

## Portal for health providers

- Fallback entry (not integrated)

# Communication with ELGA



**ELGA will not substitute face to face communication between health professionals and patients but upholds with knowledge.**