e-health in Austria – An overview

Walter M. Bugnar

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The Austrian e-card project

The Austrian e-health landscape

The Austrian EHR - ELGA

e-medication

Discussion

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Requirements to the Compound System - Openness of the System

- Design of the e-card as a „Key card"

- Access to personal data after approval of the cardholder (§31a (2) ASVG)

- The e-card system shall support the transparency of medical services and costs

- Acceptance of other cards with „Citizen Card Functionality" (i.e. prepared for e-government).

- Load ability of new applications:
  Post Issuance Personalization and downloading of data, data structures and cryptographic key-files to the e-card

- Innovation and migration:
  Simultaneous operation of several „generations" of smart cards with different scope of applications

Features of the e-card

- The e-card is a **smart key card** and **signature card** enabling reliable verification of health care entitlements

- The e-card incorporates **2 signature applications** which support
  - Secure Electronic Signatures (for e-gov applications according to SigG and SigV)
  - Social Insurance Signatures

- The e-card stores holder's name, date of birth, sex, social insurance number, card serial number and user group identification

- The e-card is the **European Health Insurance Card**
  - replaces form E-111 for stays abroad
  - valid in the EU, EEA and Switzerland
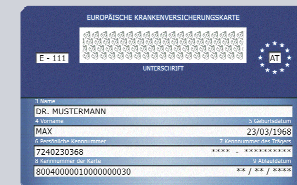
The e-card today

The savings to the administrative area are given annually to approximately € 50 million.

The Austrian population is excited by the e-card. Almost 90% said in 2009 that the e-card with "very good" or "good".

Also the Health professionals are glad with the e-card.

e card

123   1234 567890

Dr.
Max
Mustermann

www.sozialversicherung.at, Serviceline 050124 33 11

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The Austrian e-health landscape - Roadmap

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e-medication

ELGA

preventive medical checkup

e-referral

pharmaceutical granting service

e-card-infrastructure + application: eligibility check

e-card-infrastructure + rollout

2004   2005   2006   2007   2008   2009   2010   2011   t
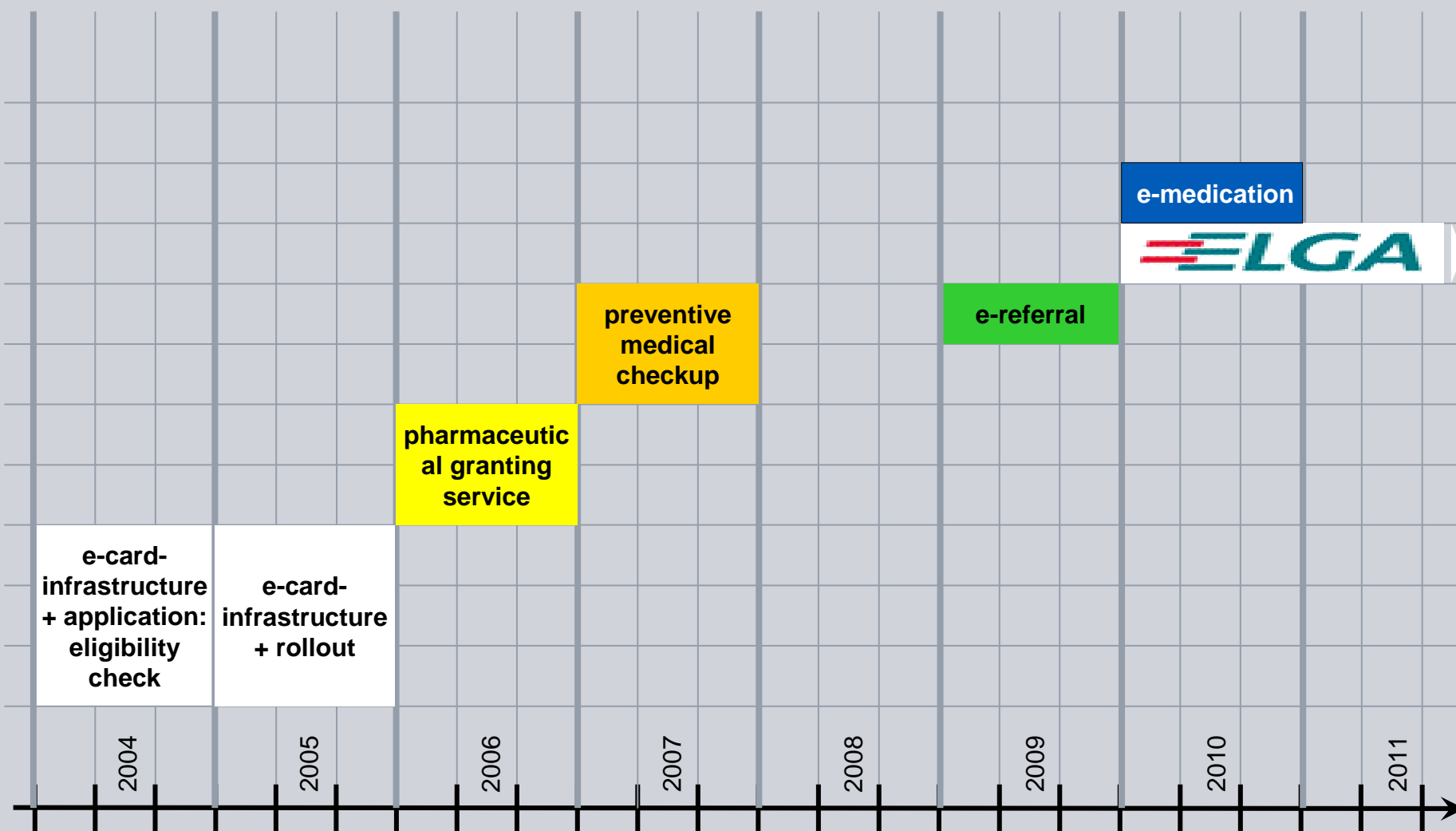
The Austrian e-card project – e-card network (2009)

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Doctor's Software

Doctor's practice

Pharmacy Software

Pharmacy

HIS

sGINA

optional

Hospital

GIN, ehi-net, healix

Citizen / Patient

Internet

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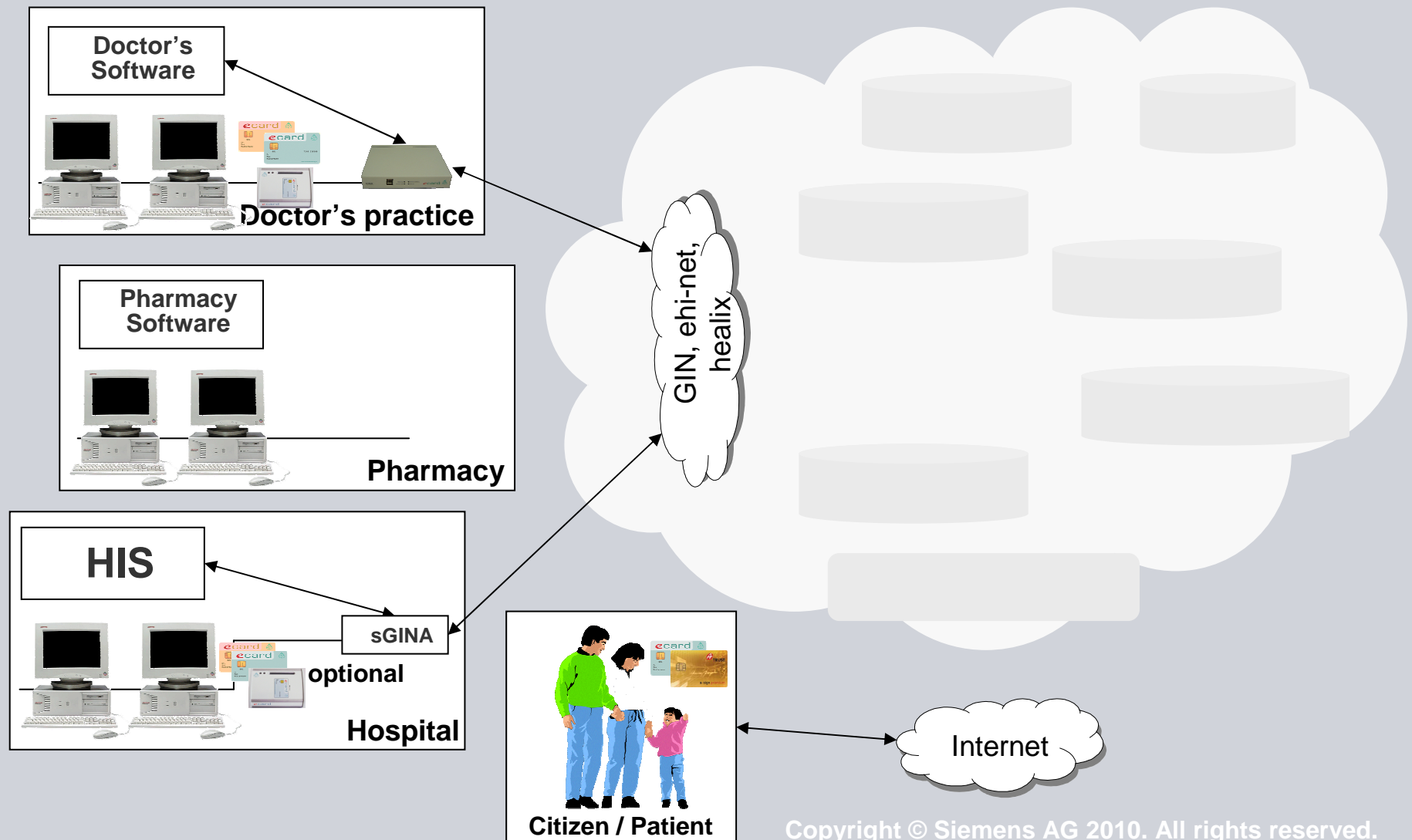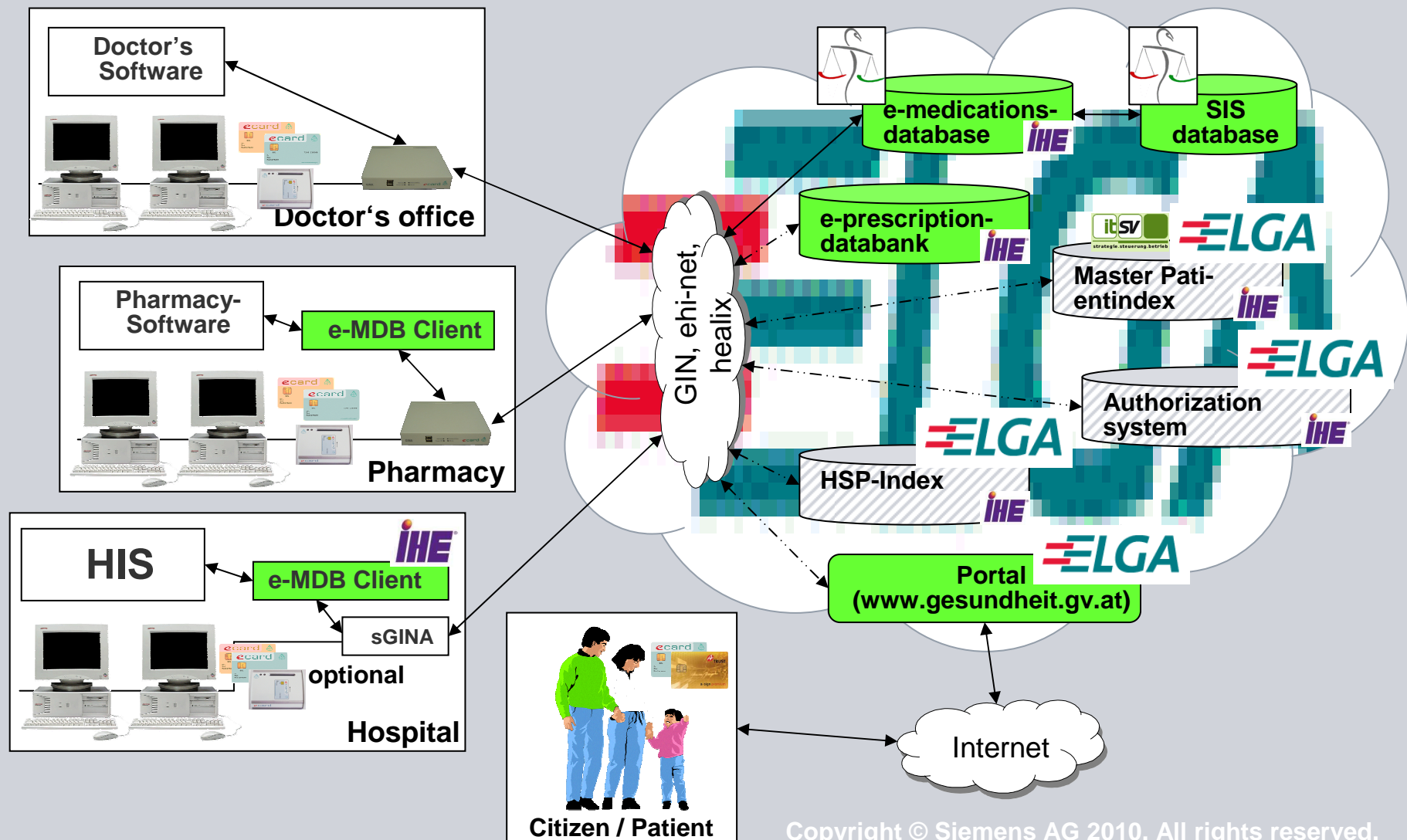
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Definition

The electronic health record, ELGA short, is a system that manages all relevant health data of citizens electronically. The main treatment data will be stored. ELGA is the combination of existing projects and structures and focuses on the international market. The ELGA Ltd., which is responsible for the implementation of the EHR, integrates all users of ELGA in the planning work. This is a strict privacy protection and authorization system as a basis for the use of ELGA. For this purpose, the existing e-health law is reformed. Based on current and long past polls more than 90% of Austrians evaluate applications around the e-card and ELGA positive.

The individual projects of the ELGA - especially e-medication, the normalization for release documentation, laboratory and radiographic findings and epSOS are primarily for the quality assurance and cost savings. An epSOS trial run is planned for early 2011.

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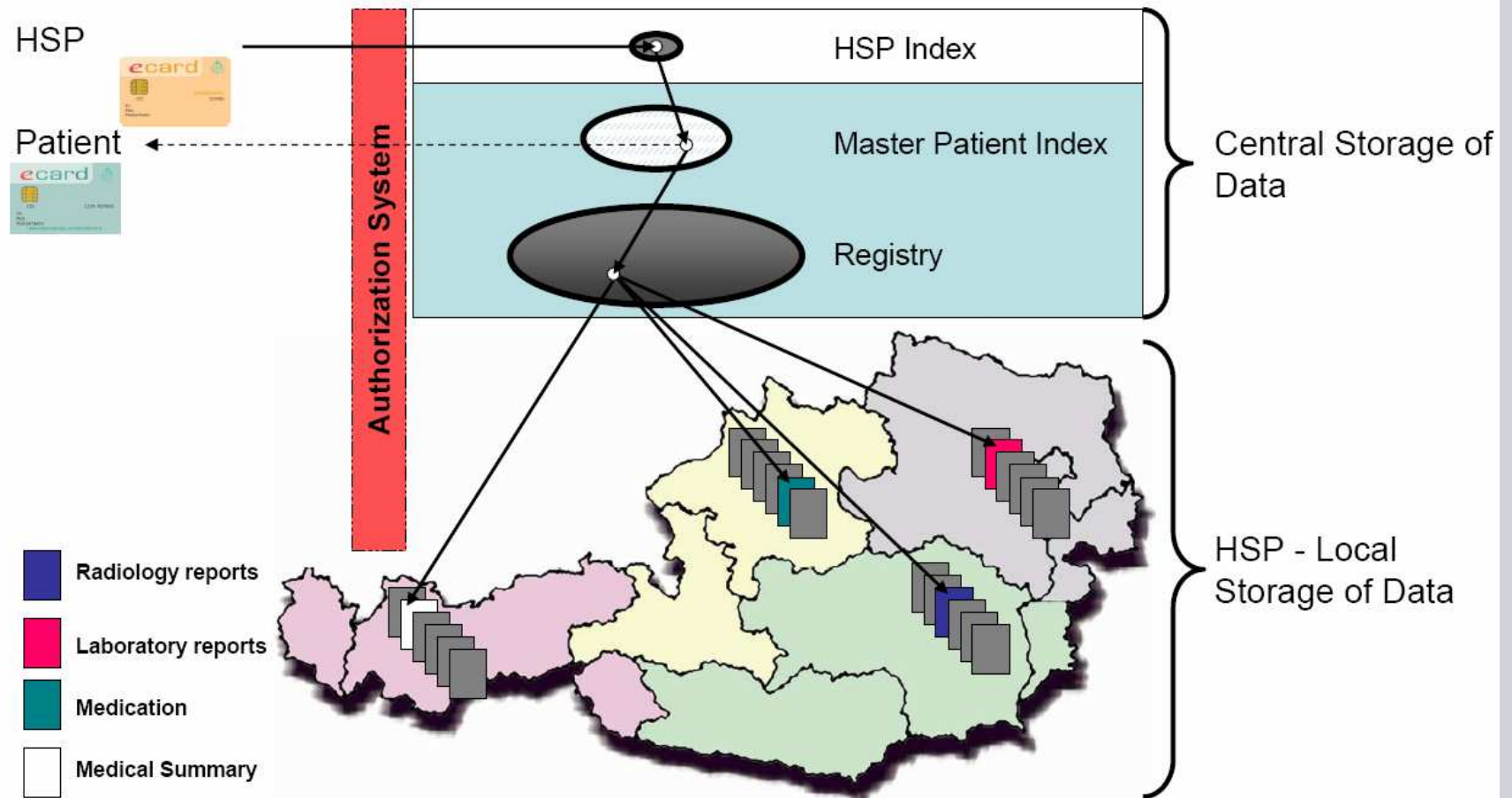# e-health in Austria – The Austrian EHR – ELGA (2011)

Doctor's Software

Doctor's office

e-medications-database

SIS database

e-prescription-databank

Master Pati-entindex

Pharmacy-Software

e-MDB Client

Pharmacy

GIN, ehi-net, healix

Authorization system

HSP-Index

HIS

e-MDB Client

sGINA

optional

Hospital

Portal (www.gesundheit.gv.at)

Citizen / Patient

Internet

Framework Architecture and Main Applications

ELGA

„A hyper-index with sophisticated search functions"

Adaptors: Interfaces which make existing applications compatible with ELGA

ELGA View on Data

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Phase: Pilot and Evaluation

Creation of basic infrastructure and the environment

What is the e-medication?
- A project on medical quality assurance
- Pharmacists and doctors are informed about the dispensed and their drug interactions, treatment compliance and multiple consumption
- Saves more than € 100Mio and more 1.000 lives annually

Who benefits?
- We patients - And thus the payer health system
- Pharmacists
- doctors

Users: Around the Donauspital, KH Wels-Grieskirchen, KH Reutte/Zams
- e-card Owner (patients)
- To the e-card system to be attached pharmacies
- Practices (already at the e-card system connected)
- Practices with pharmacy (already at the e-card system connected)
- Hospitals (already at the e-card system connected)

e-health in Austria – e-medication

Phase: Pilot and Evaluation

Functions:
- e-medication database contains dispensed pharmaceuticals and documentation of warnings
- The "Spezialitäteninformationssystem" of Apothekerverlag contains the information's of pharmaceuticals and interactions
- tracking the compliance of prescribed medication and over the counter products
- Medication lists for patients in doctors' offices and pharmacies

Technical implementation:
- The pharmacies, doctors' offices and hospitals are using the star-shaped network GIN, ehi-net, or HEALIX
- The functionality of the e-medication can be used in the Doctors, pharmacies and health information system (integrated) or as stand-alone client
- The implementation is carried out in accordance with national guidelines (EHR, e-card infrastructure) as well as international standards (IHE)

Data protection:
- Participation of e-card-users is voluntary, free, revocable at any time.

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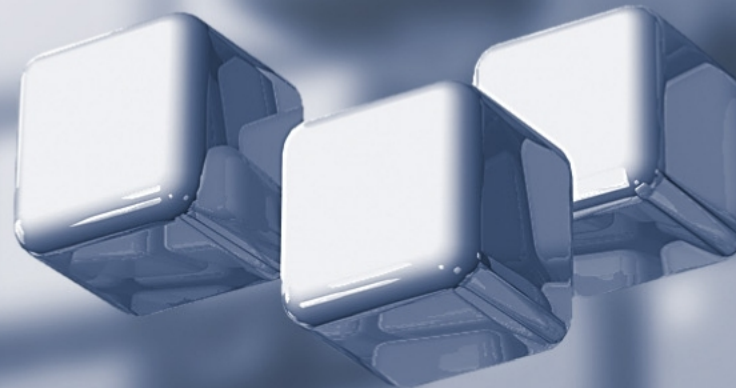The Austrian e-health landscape

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Thank you for your attention!

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