

ELGA

the Electronic Health Record in Austria

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www.initiative-elga.at

August 29th, 2008

SMIT2008

20th International Conference of
Society for Medical Innovation and Technology
28 - 30 August 2008
Vienna, Austria

joint presentation:

INITIATIVE ELGA

www.initiative-elga.at

- Information
- Communication
- Discussion
- Creation

„There are three types of organisations:

those who make things happen,
those who watch things happen and
those who wonder what has happened!“

„... improvement never stops!“ ©

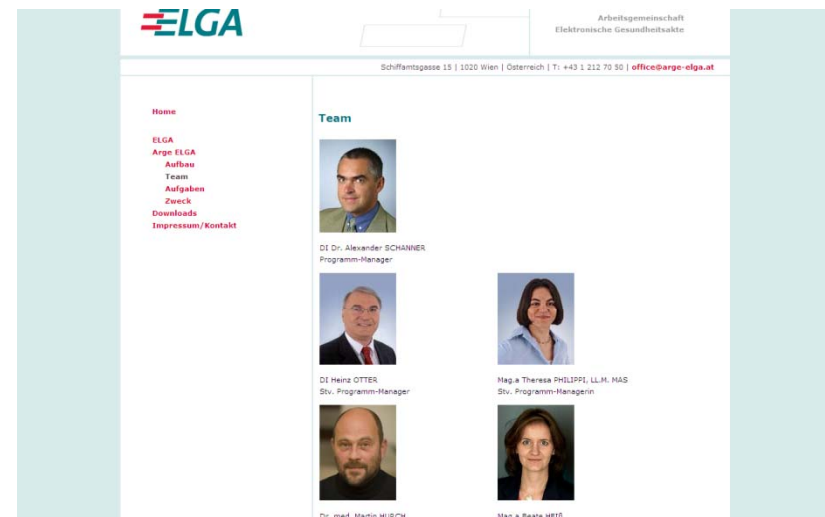


Dr. Christian Husek
General Practitioner
www.initiative-elga.at

ARGE ELGA

- Arbeitsgemeinschaft Elektronische Gesundheitsakte
(working group electronic health record)

www.arge-elga.at



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Deputy Program-Manager
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Arbeitsgemeinschaft
Elektronische Gesundheitsakte

INITIATIVE ELGA

www.initiative-elga.at

NGO

physicians, pharmacists, patients, etc.

Main concerns:

- Privacy
- Usability
- Legal perspectives
- Costs
- Workload for HSP`s

ARGE ELGA

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Government organisation

- Organisational issues
- Legal preconditions
- Finances
- Technical environment
- Political issues

Why EHR ?

- International trend, due to data amount
- Better availability, faster access, better interoperability
- Health market is still an upcoming business for IT-industry
- Cost effectiveness often also is an argument
- EU-driven purpose to implement EHR`s in Europe, but health systems still are very heterogeneous

Situation in Austria

- **Most austrian doctors** use (and in our social health system need to use !) electronic data systems and have their **personal office-software**
- Most **lab results, radiology reports, specialist reports** and **hospital discharge summarys** already today are forwarded electronically to the **requesting physician** via **special medical data transmitting systems** („Medicalnet“, „DA-ME“) directly into the office software system:

(„push-system“)

Confirm of consent by the patient



Ich, Heinrich Test bin einverstanden, dass
Dr. Hubert Testmaier meine Daten (siehe unten) bei folgenden
Krankenanstellen ermittelt. Gleichzeitig stimme ich zu, dass diese angefragten
Krankenanstellen diese Daten an den Wiener Krankenanstaltenverbund
übermittelt.

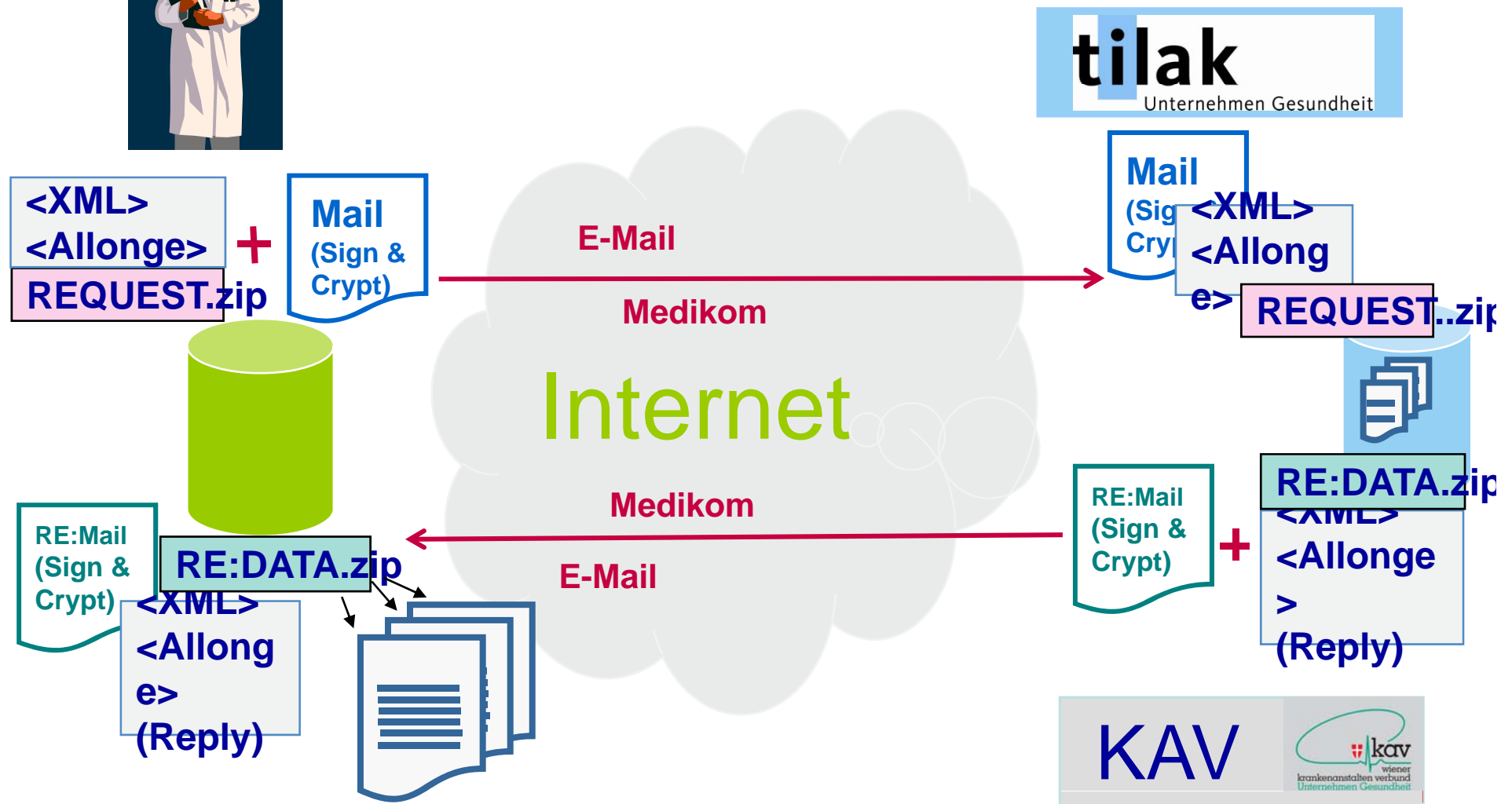
- Universitätsklinik Innsbruck
- Anzufragende Krankenanstellen:
 - Aufenthalt: 2008
 - Zu ermittelnde Daten über die angegebenen Aufenthalte:
 - ☒ Patientenidentifikationsnummer
 - ☒ Aufenthaltsdauer (von – bis), Aufenthaltstyp (stationär oder ambulant),
Anstalt, Medizinische Organisationseinheit (Abteilungskostenstelle inkl.
Transfer)
 - ☒ Patienten-/Arztbrief
 - ☐ Krankengeschichte
 - Zweck: Die Ermittlung der Daten erfolgt einmalig / wiederkehrend für diesen
Aufenthaltes zum Zwecke meiner besseren und wirkungsvollen Behandlung.

Diese Zustimmung kann ich jederzeit ohne Begründung widerrufen. Ab diesem Zeitpunkt
findet keine Ermittlung und Übermittlung von Daten auf Grund dieser Zustimmungserklärung
über die angegebenen Aufenthalte mehr statt.

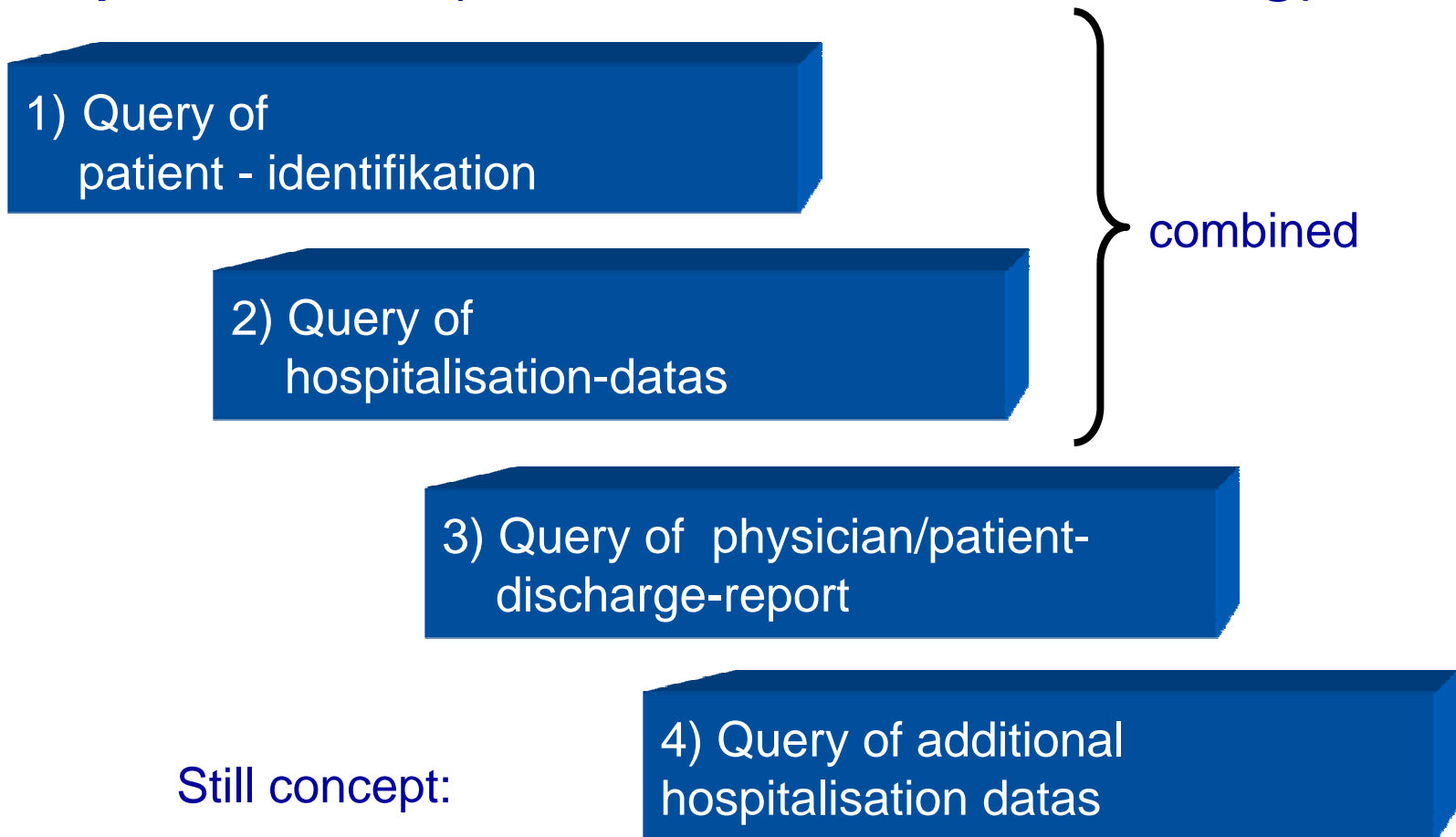
Heinrich Test

.....
(Datum, Unterschrift)

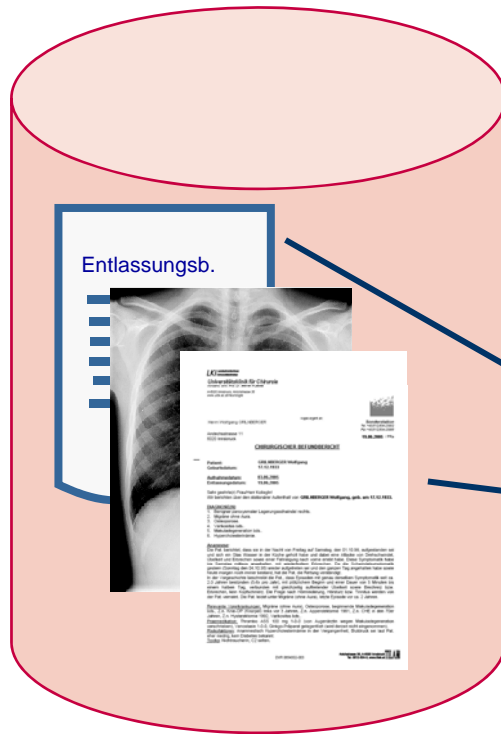
Document - Request:



„Step-Modell“ (Schlemmer-Schindelwig)



Hospital - Database



Hoza Tibor - web.okra - Microsoft Internet Explorer

Adresse: <http://medarc.wienkav.at/kar/mainFrm.asp>

Benutzer: Hoza Tibor (wienkav\igvhot) **Kostenstelle:** Krankenhaus Rudolfstiftung (9173)

Berufsgruppe: EDV-Support **Patient:** GRILNBERGER Wolfgang, geb.:17.12.1933 M, #1574

Situation: Standard-Auskunft für EDV-Personal **Aufenthalt:** Alle

PATIENT

GRILNBERGER Wolfgang, geb.:17.12.1933 M, #1574

Alle Leistungen zu diesem Patienten

AUFNAHMEBLATT/PATIENTENDATEN

ABSCHLUSS DES PATIENTEN

- Entlassungsbericht vom 01-09-2003 / 09:34
- Entlassungsbericht vom 12-08-2003 / 14:04
- Entlassungsbericht vom 12-05-2003 / 09:05
- Patientenbrief vom 19.06.2005 / 11:15**
- Entlassungsbericht vom 11-02-2003 / 10:22
- Entlassungsbericht vom 29-01-2003 / 13:07
- Entlassungsbericht vom 13-01-2003 / 13:58
- Entlassungsbericht vom 08-01-2003 / 14:34
- Entlassungsbericht vom 29-03-2002 / 10:38
- Patientenbrief vom 21-12-2001 / 10:39
- Entlassungsbericht vom 28-12-2000 / 11:46
- Entlassungsbericht vom 07-11-2000 / 11:52
- Patientenbrief vom 28-05-2000 / 11:25
- Patientenbrief vom 24-05-1994 / 14:43
- Patientenbrief vom 14-04-1994 / 06:59
- Patientenbrief vom 02-02-1994 / 09:47

LKF DATEN/ MEL DATEN

DOKUMENT: 4/16 DATEI: 0/0 SEITE: 0/0

Patientenbrief vom 11-02-2003 / 11:15

LKI Landeskrankenanstalt
Universitätsklinik für Chirurgie
Vorstand: Univ. Prof. Dr. Werner POEWE
A-5020 Innsbruck, Anichstrasse 35
www.uibk.ac.at/neurologie

Herrn Wolfgang GRILNBERGER

Kopie ergut an:

Andechstrasse 11
6020 Innsbruck

Sonderstation
Tel: +43(512)504-21002
Fax: +43(512)504-21080
19.06.2005 / PRa

CHIRURGISCHER BEFUNDBERICHT

Patient: GRILNBERGER Wolfgang
Geburtsdatum: 17.12.1933
Aufnahmedatum: 03.06.2005
Entlassungsdatum: 19.06.2005

Sehr geehrte(r) Frau/Herr Kollegin!

Wir berichten über den stationären Aufenthalt von **GRILNBERGER Wolfgang, geb. am 17.12.1933.**

DIAGNOSE(N):

1. Benignes paroxysmaler Lagerungsschwindel rechts.
2. Migräne ohne Aura.
3. Osteoporose.
4. Varikosis bds.
5. Makuladegeneration bds.
6. Hypercholesterinämie.

Anamnese:

Die Pat. berichtet, dass sie in der Nacht von Freitag auf Samstag, den 01.10.98, aufgestanden sei und sich ein Glas Wasser in der Küche geholt habe und dabei eine Attacke von Drehschwindel, Übelkeit und Erbrechen sowie einer Fallneigung nach vorne erlebt habe. Diese Symptomatik habe

Idea of ELGA

(Elektronische Gesundheitsakte) = Austria's EHR

- “**pull-system**” !
- Data are **available independently of place and time** (cost-saving) at the place of treatment for all **authorized persons** according to the **tasks and needs of these persons** and in **compliance with data protection rules**.
- ELGA contains **relevant** multimedia-based and health related **data and information** referring to a **precisely identified person**.
- Data und information **originate** from
 - different **health service providers** and
 - from the **patient himself/herself**and are **stored** in one or several **different information systems** (**virtual health record**).

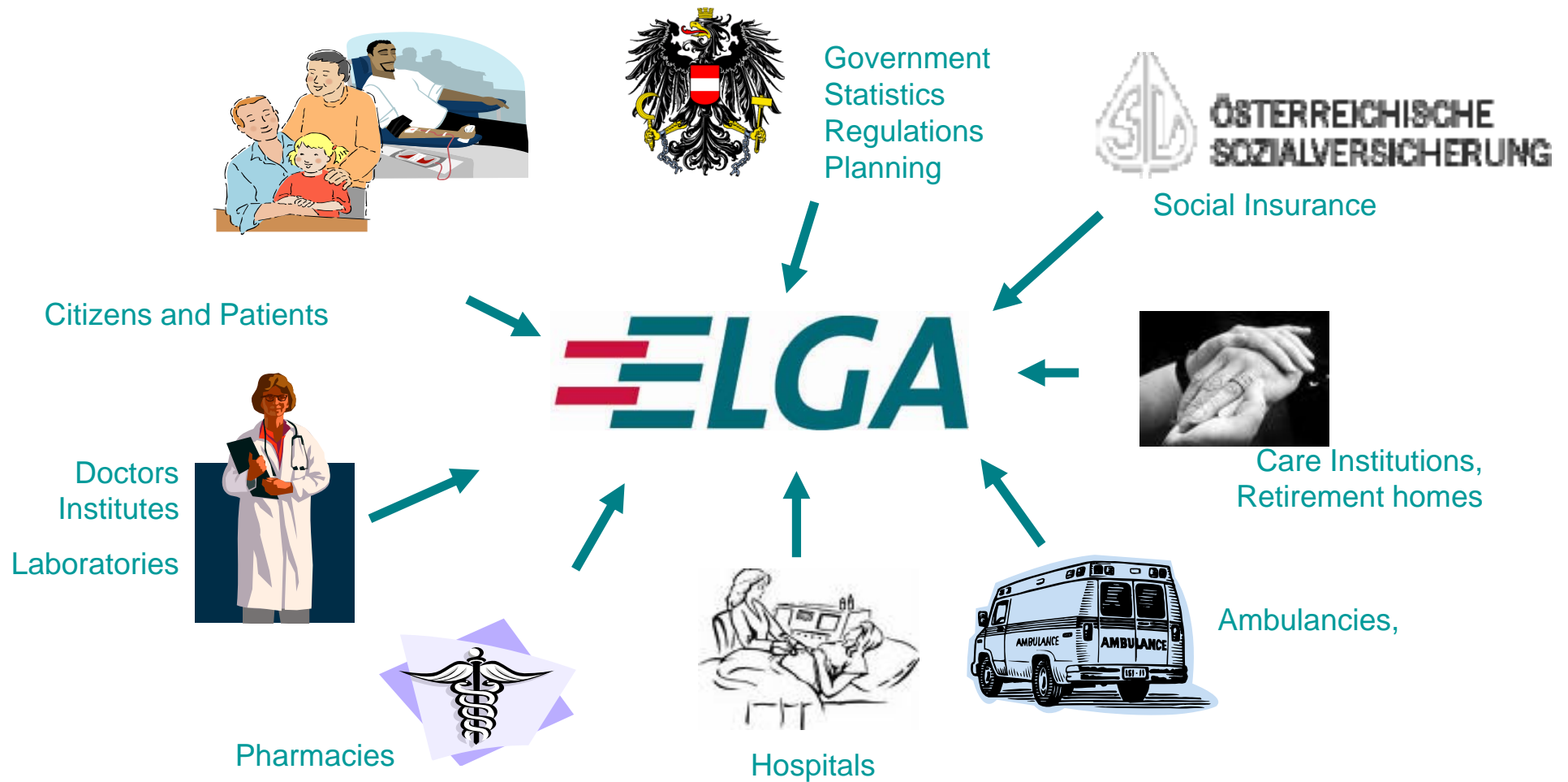
Connecting:

all Health Service Providers in Austria

- ~ 35.000 Doctors
- ~ 4.500 Dentists
- ~ 5.100 Pharmacists
- ~ 1.200 Pharmacies
- 269 Hospitals
- ~ 755 Independent ambulatory
- ? Nursing Homes with medical supervision

-
- ~ 60.000 nurses
 - ~ 1.700 midwives
 - ~ 5.129 Health Psychologists
 - ~ 5.149 Clinical Psychologies

Users of ELGA



The benefits of ELGA for patients

- More information about your own health data
- More and better quality information
- Faster access to data
- No delays – earlier start of therapy
- Redundant checks to be reduced
- Better and safer data management
- Better quality of communication
- Better and safer data management
- „Full picture“ – all relevant data available
- Driver towards more patient orientation
- Decentralised creation, storage and retrieval of data
- Competitive market for suppliers of technology

Improved continuity of care

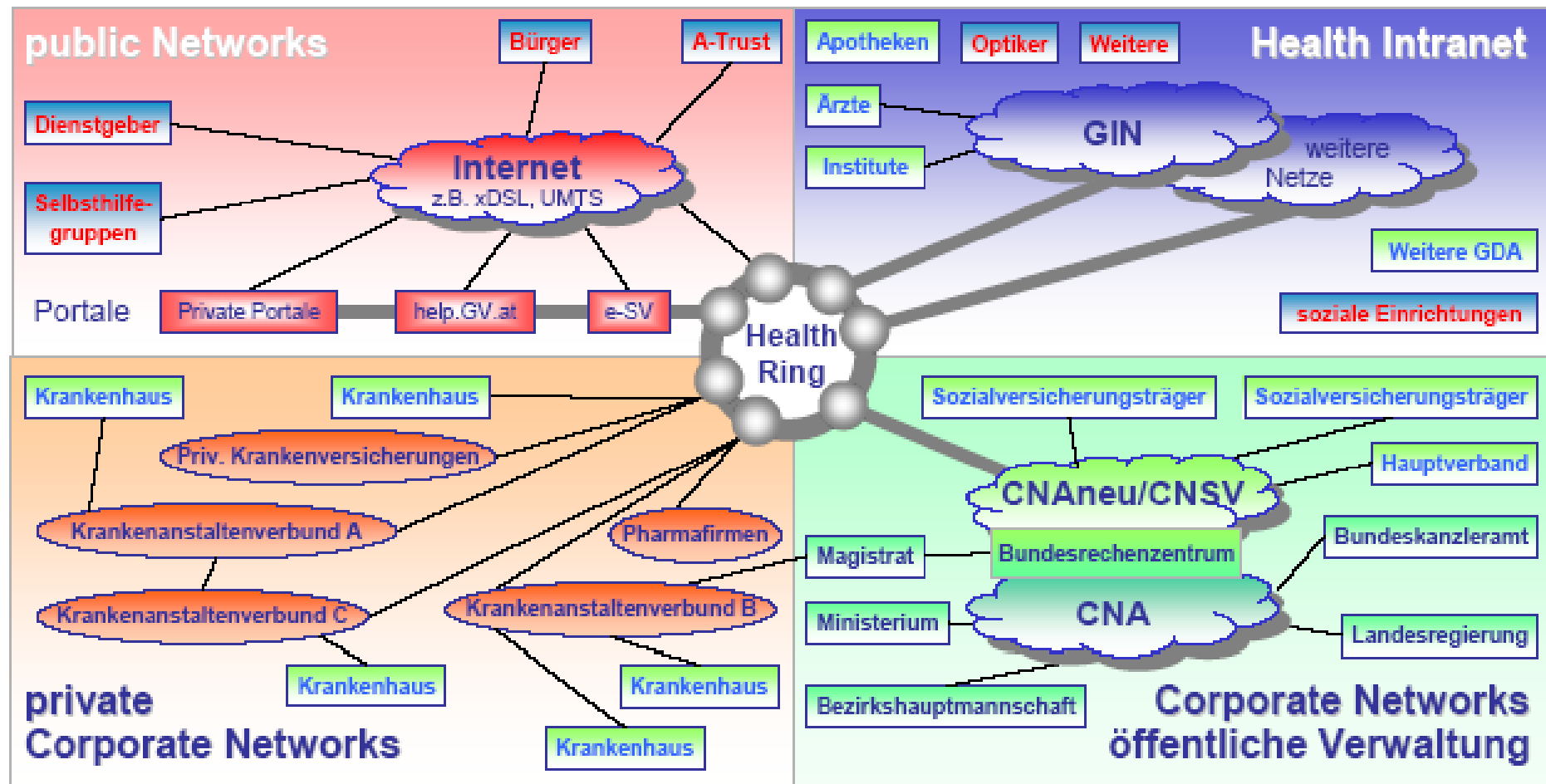
can be defined as ensuring a :

seamless pathway for the patients care

It is partly dependant on the **coordination between health professionals** and it is an essential criterion of quality

- between hospitals,
- inside/outside hospitals;
- inside hospitals;
- between health professionals of primary care sector;
- health professionals in a cross border context;
- between health professionals and patients.

Health Networks in Austria



The Austrian e-card System



- The Main Association of Austrian Social Security Institutions was entrusted by law with the introduction and operation of the “**Electronic Administration System**”. The aim of this is to support administrative processes between insured people, employers, doctors and hospitals as well as Social Security Institutions.
- The **first step** was the **replacement of health insurance vouchers by a smart card** – however the Austrian e-card is now much more than only a **online health insurance** card.

The Austrian e-card System



- The e-card system **provides a secure broadband connection** within the health sector and the **infrastructure for a number of future projects** (“rail system”).
- In addition, the Austrian e-card contains **signature applications** and is ready to be used as a **citizen card**.

Task Force Electronic Health Record

Arbeitsgemeinschaft Elektronische Gesundheitsakte - **ARGE ELGA**

- Decision of **Federal Health Commission** from July 2006 concerning establishment of Arge ELGA and financial remuneration
- Working basis of **Arge ELGA** is an agreement between
 - Federal Government
 - Provinces and
 - Social Insurance Institutions
- **Since September 2006** ARGE ELGA is acting operationally
Location: A-1020 Vienna, Schiffamtsgasse 15

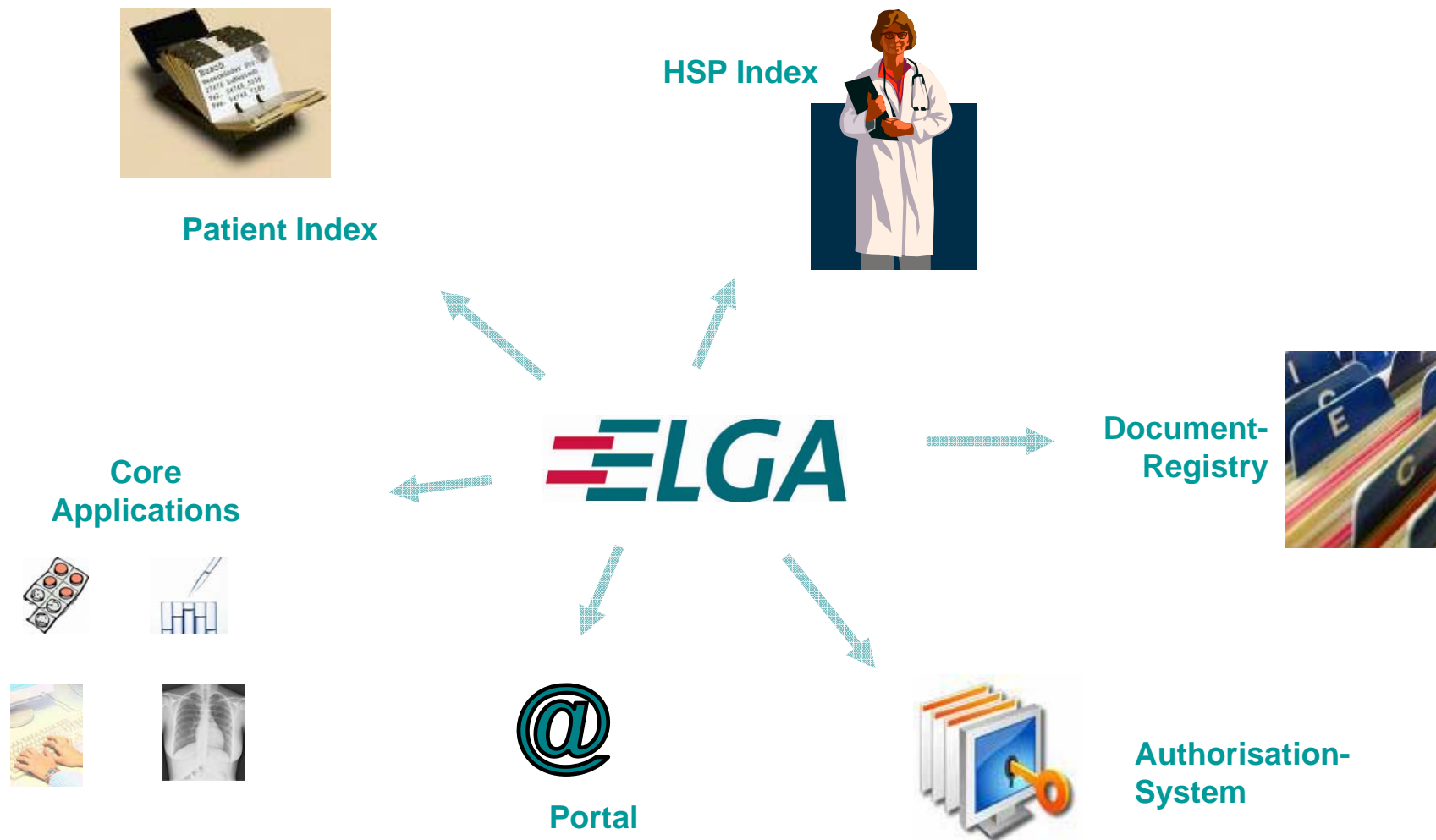
Initial Situation



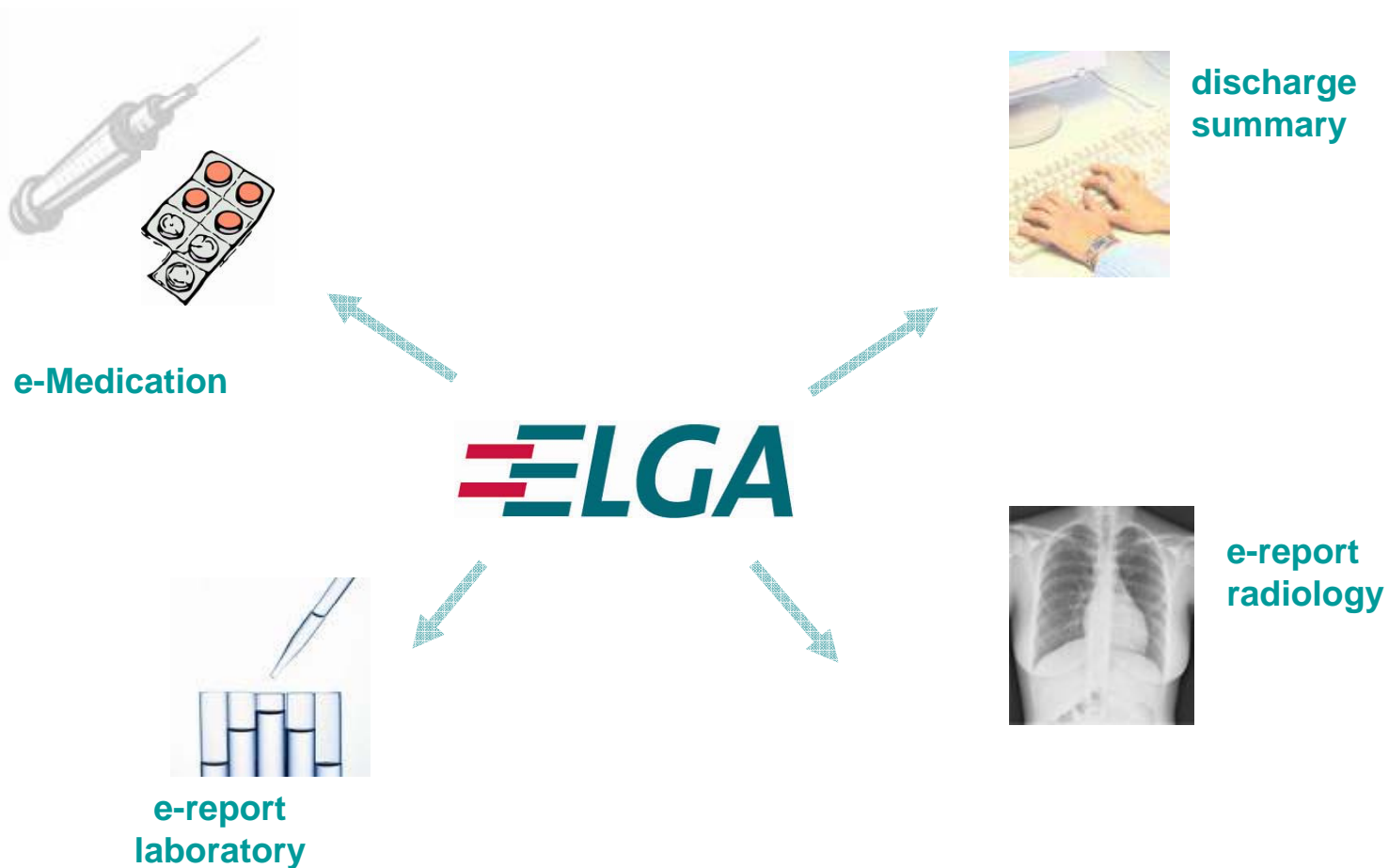
Preconditions for ELGA

- participation in the „making-of“ ELGA
- **Close cooperation** with all groups
 - Federal Government
 - Provinces
 - Social Insurance Institutions
 - stakeholder
 - Health Service Provider
 - experts (e-Health, architecture; privacy law, data security, ...)
 - ...
- **Data protection and privacy is indispensable for the success of ELGA**

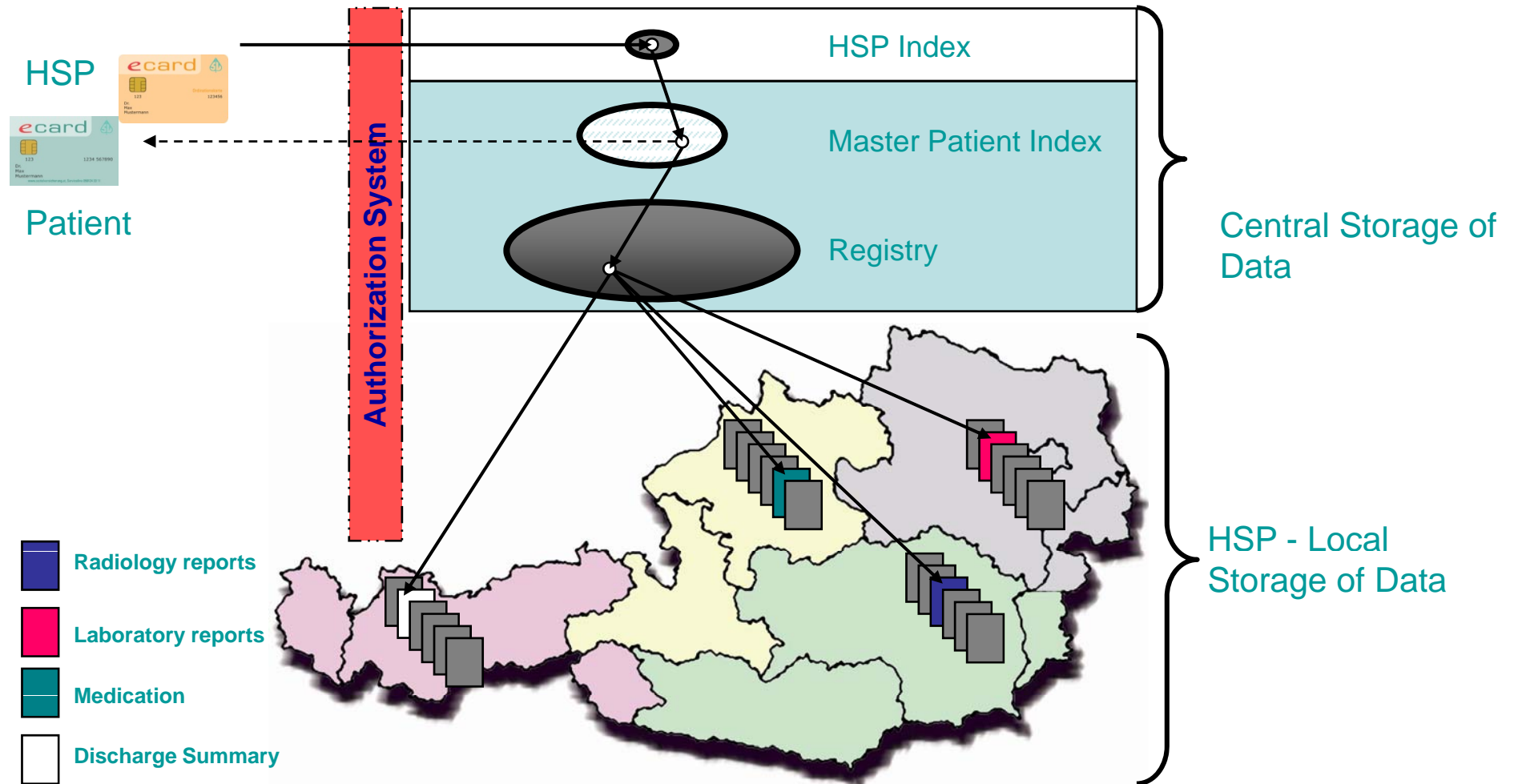
ELGA Projects



Core Applications



ELGA View on Data



Interoperability – Standards and Catalogs

- Technical (**syntactical**) interoperability
- Content wise (**semantical**) interoperability
- Requirement:
Assortment of **international standards**
- - Standards rise quality and reduce costs!
 - Standards promote competition!

ELGA: costs

- Proposed:
30 Millions of Euro`s for the **initial concept** and **applications**

real costs still unknown
- for comparision: similar systems in
Germany: estimated costs up to 7 billions of Euro`s
England: 20 Billions of Euro`s already invested in refurbishing NHS – datasystems, estimated 10 more billions needed

Main messages about the making of ELGA

- ELGA is **still „in the making“**
- The planning of ELGA will allow for a **maximum of participation**
- **doctors, patient groups and privacy experts** are the **main stakeholders**

Thank you for your attention!

Have an interesting stay!

Enjoy Austria!