

Telematik-Rahmenarchitektur
April 4th 2003, ZTG, Krefeld

***The Missing eHealth
Strategy in Switzerland:
From Deregulation to
Innovation?***

***Martin D. Denz, Head eHealthcare
Swiss Medical Association FMH***

Overview

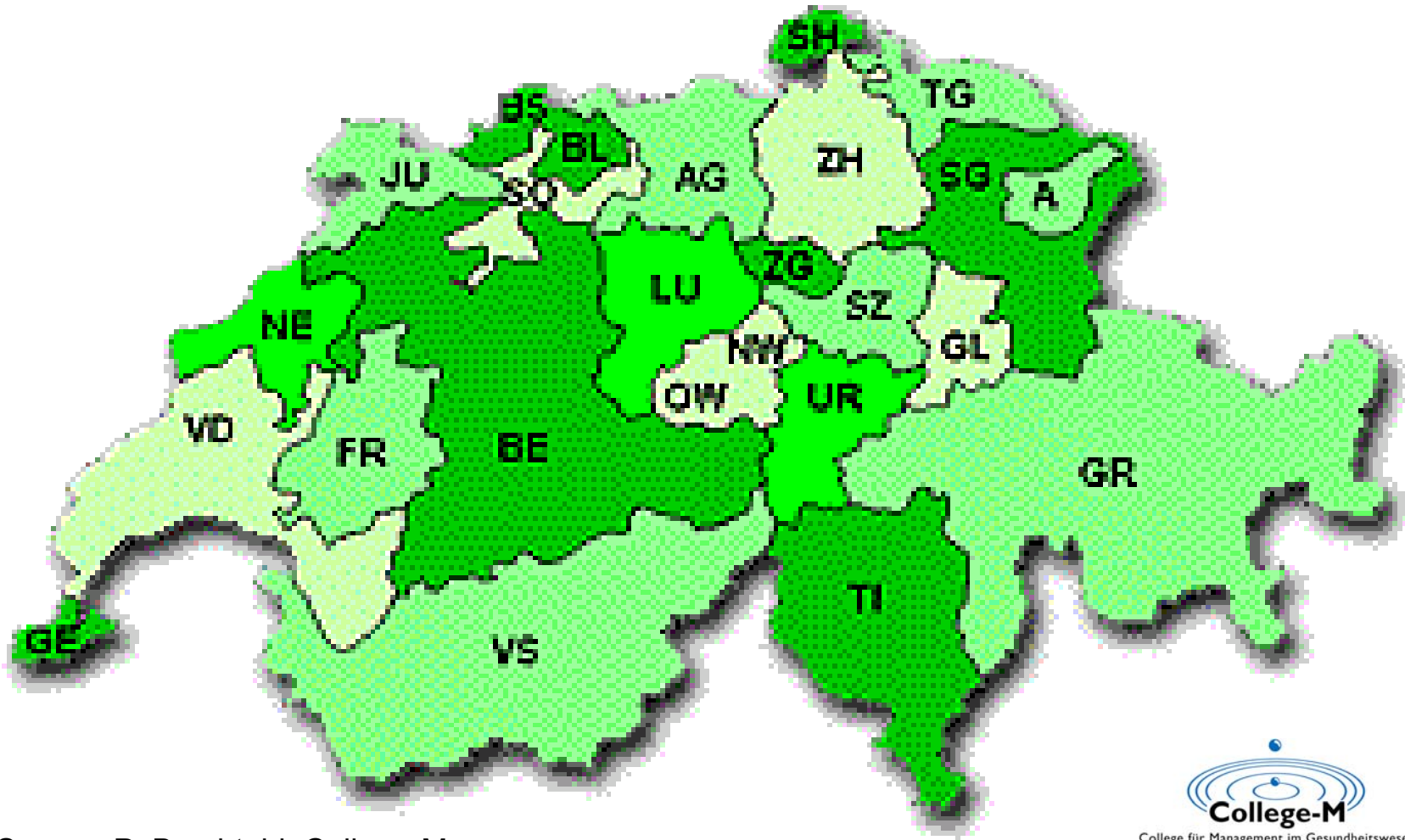
- 1. Swiss Healthcare System***
- 2. Key Players and Stakeholders***
- 3. Electronic Health Card***
- 4. Electronic Health Record***

Federal Government's Strategy

1998 "Strategy Infosociety"

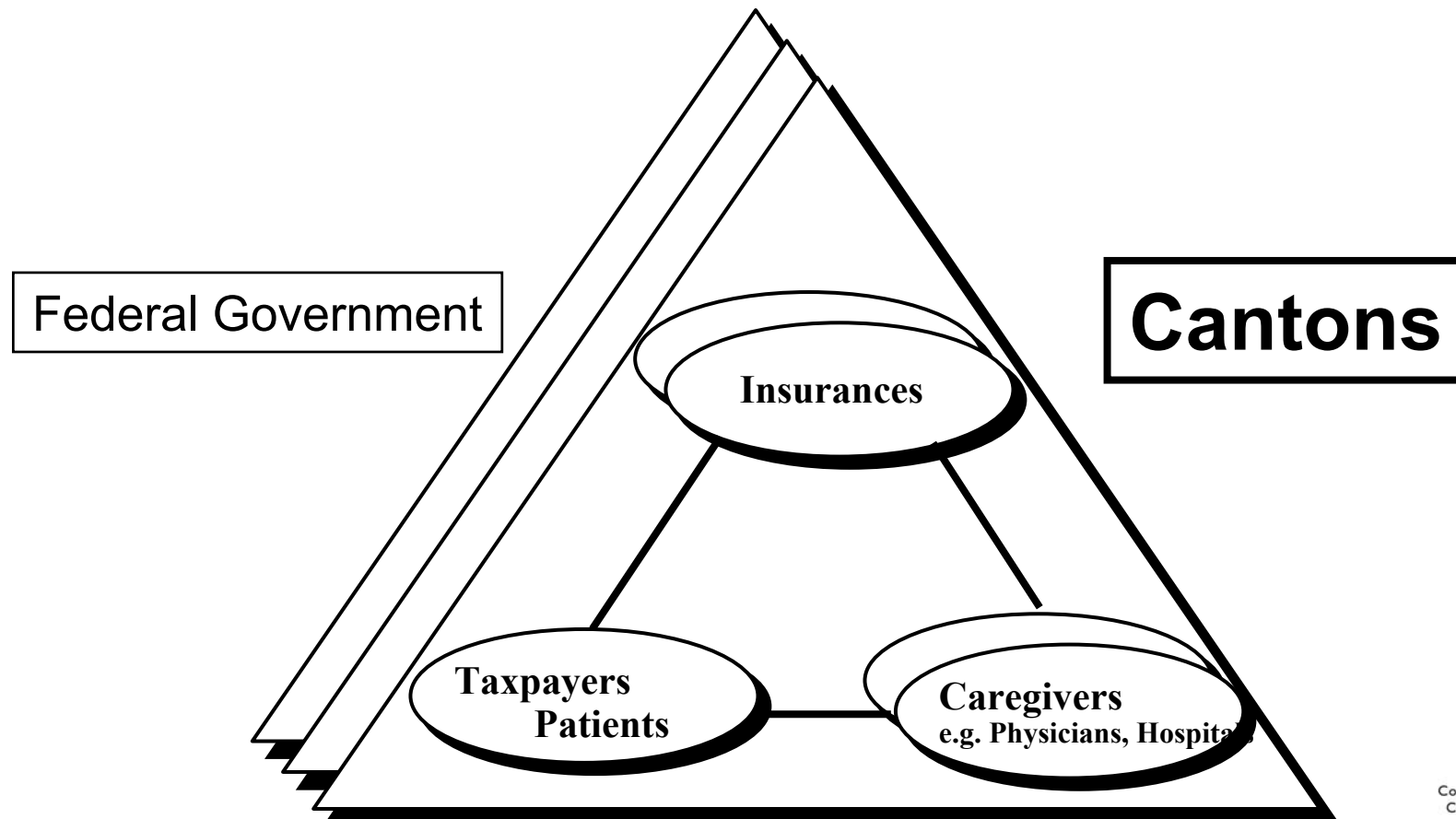
- ***Abstention from any Key Role***
- ***No Mentioning of Healthcare***
- ***Innovation left to Private Initiative***
- ***Government's responsibility for social development of infosociety***

1 Country, 26 Healthcare Systems



Source: P. Berchtold, College-M

Players in Swiss Healthcare



Legal Framework (KVG 1994)

- **Obligatory health insurance, same service for all**
- **Optional features: HMO/PPO-models, Franchise**
- **Free choice of insurer (competition!)**
- **Federal Government defines complete services catalogue (for in- and outpatients)**
- **Private insurances (Hotel services, free choice of physician and hospital) are not part of the regulated social insurance (solidarity excluded)**

Source: P. Berchtold, College-M

Legal Framework (KVG 1994)

- ***Cantons (States) organize provision of medical care: Hospitals (planning, hospital lists, contribution), emergency services***
- ***Physicians paid by insurances: Compulsory contract***
- ***Reimbursement by scales ("Tarife") negotiated between caregivers and insurances (authorities)***
Outpatients: TarMed, individual fees for private facilities
Inpatients (KVG): lump sums ("Pauschalen")

Source: P. Berchtold, College-M

Need for Coordination

Caregiving without coordination

6'000 general practitioners

8'000 specialists

2'000 hospitals

Redundancy

Discontinuous processes

Potential of Health Telematics

Swiss healthcare system costs

CHF 45 Mia / year

***Theoretical potential of
optimization 10-20%***

≥ CHF 8 Mia / year

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Swiss Federal Social Insurance Office

Innovation in Healthcare Delivery

Useful Complement?

➔ Test Practical Value

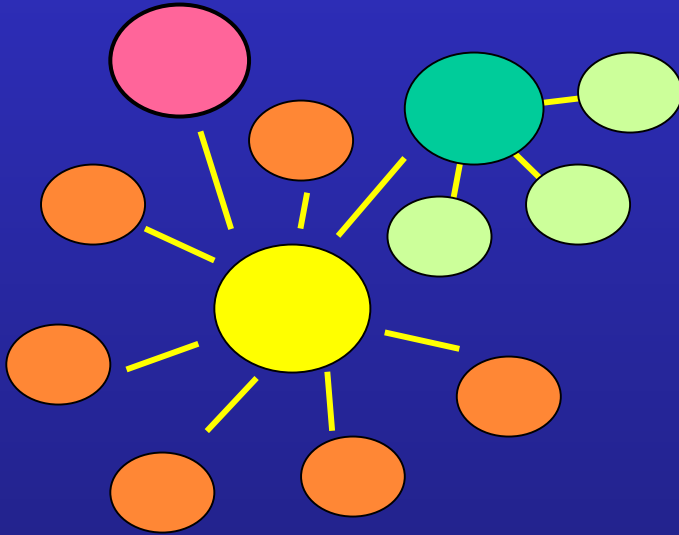
➔ Deliver Quality

➔ Gather Experience

Let's do it!

Source: F. Britt, Vice-Director BSV

Fostering Networks & Managed Care



Use of legal liberties

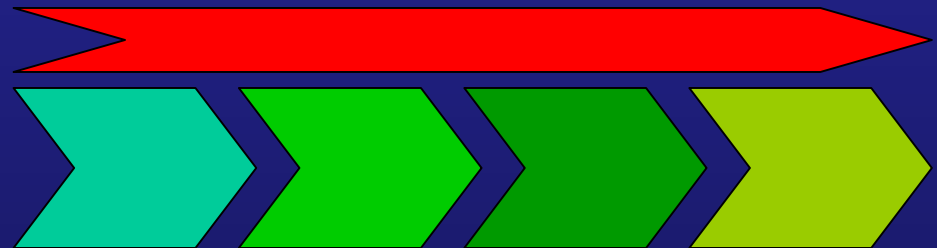
More market orientation

Data & Transparency: Choice

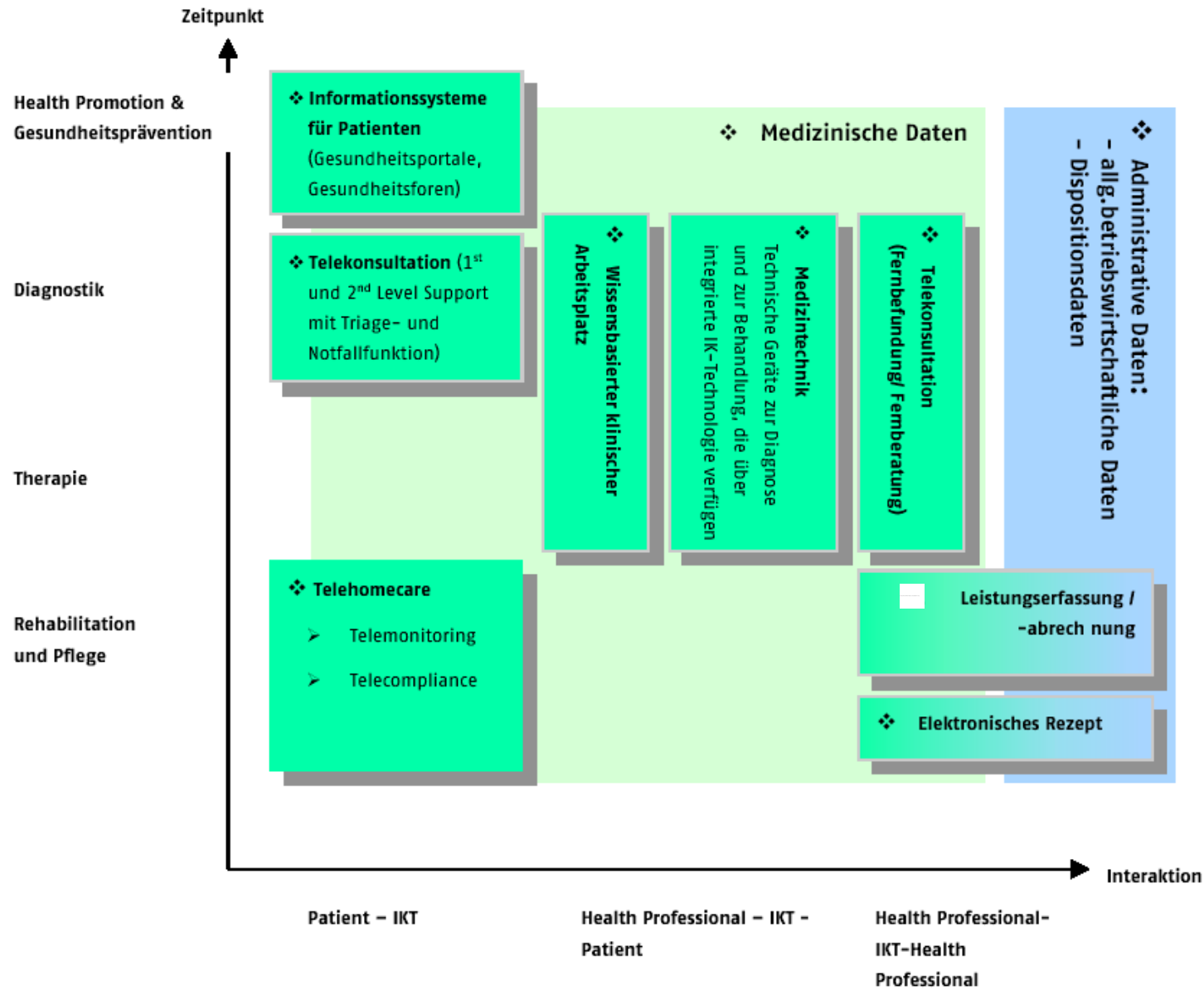
Networks

Care Management

Info & Comm Technology



Office for Education & Technology



Health Info Net

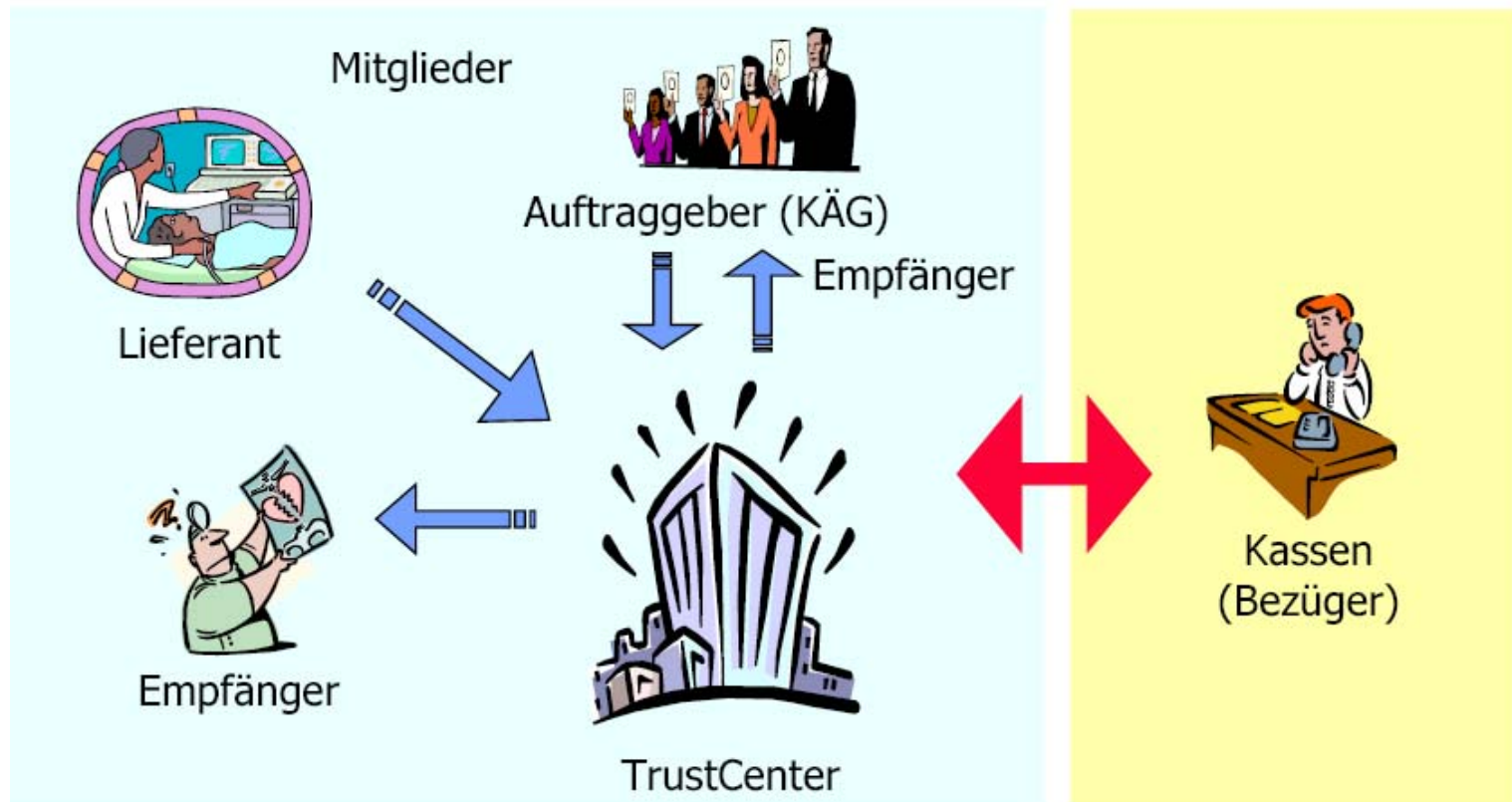
Zur Anzeige wird der QuickTime™ Dekompressor „TIFF (Unkomprimiert)“ benötigt.

www.hin.ch

- ***Spin-off of the Swiss Medical Association FMH, founded 1996***
- ***Security Provider, Internet-provider and Community (CUG) of the FMH***
- ***VPN-like client-based security solution***
- ***Free for all members of the FMH***

Doctors' own TrustCenters

Businessmodell TC



eine (vor-)Investition der Ärzteschaft

Angebot für Partner
newindex

Cultural Change: Critical Incidents

Adresse: <https://www.cirsmedical.ch/> Wechseln zu optimized for IE > 4.0

CIRsdeutsch- français- italiano- english | AKTUELLE FÄLLE | AUSWERTUNGEN | CIRs-HILFE

cirsmedical

incident report:

Bitte benutzen Sie dieses Formular zur Eingabe eines **kritischen Ereignisses** *, das ohne Intervention zu einem unerwünschten Ausgang, d.h. einer physischen od. psychischen Beeinträchtigung eines Patienten hätte führen können oder trotz Intervention dazu geführt hat. (*Ereignis verursacht durch die Behandlung/Betreuung des Patienten und nicht durch das Grundleiden des Patienten alleine)

1. Reporter

Wer berichtet: Berufsgruppe?

Bezug des Berichters zum Ereignis?

2. Patient (falls anwendbar)

Alter: Jahre

Ereignisort: ☐ Schweiz ☐ Ausserhalb der Schweiz

Spitaleintritt resp. Versorgungsart
☐ elektiv ☐ notfallmässig

3. Ereignis

Ereignisart?

Zu welcher Uhrzeit ist das Ereignis passiert?
 Zahl zwischen 0 - 24

Arbeitsbelastung des Verantwortlichen / Verursachers
 Anzahl Arbeitsstunden bis zum Ereignis

Ausbildung des Verantwortlichen/Verursachers

Wo ist das Ereignis passiert
☐ Beim Patient zuhause ☐ In der Arztpraxis ☐ Ambulatorium Poliklinik ☐ Notfallstation Rettungszone ☐ OP-Bereich inkl. Aufwachraum ☐ Intensiv Internal Care ☐ Pflegebereich chronisch ☐ Anderer Ort

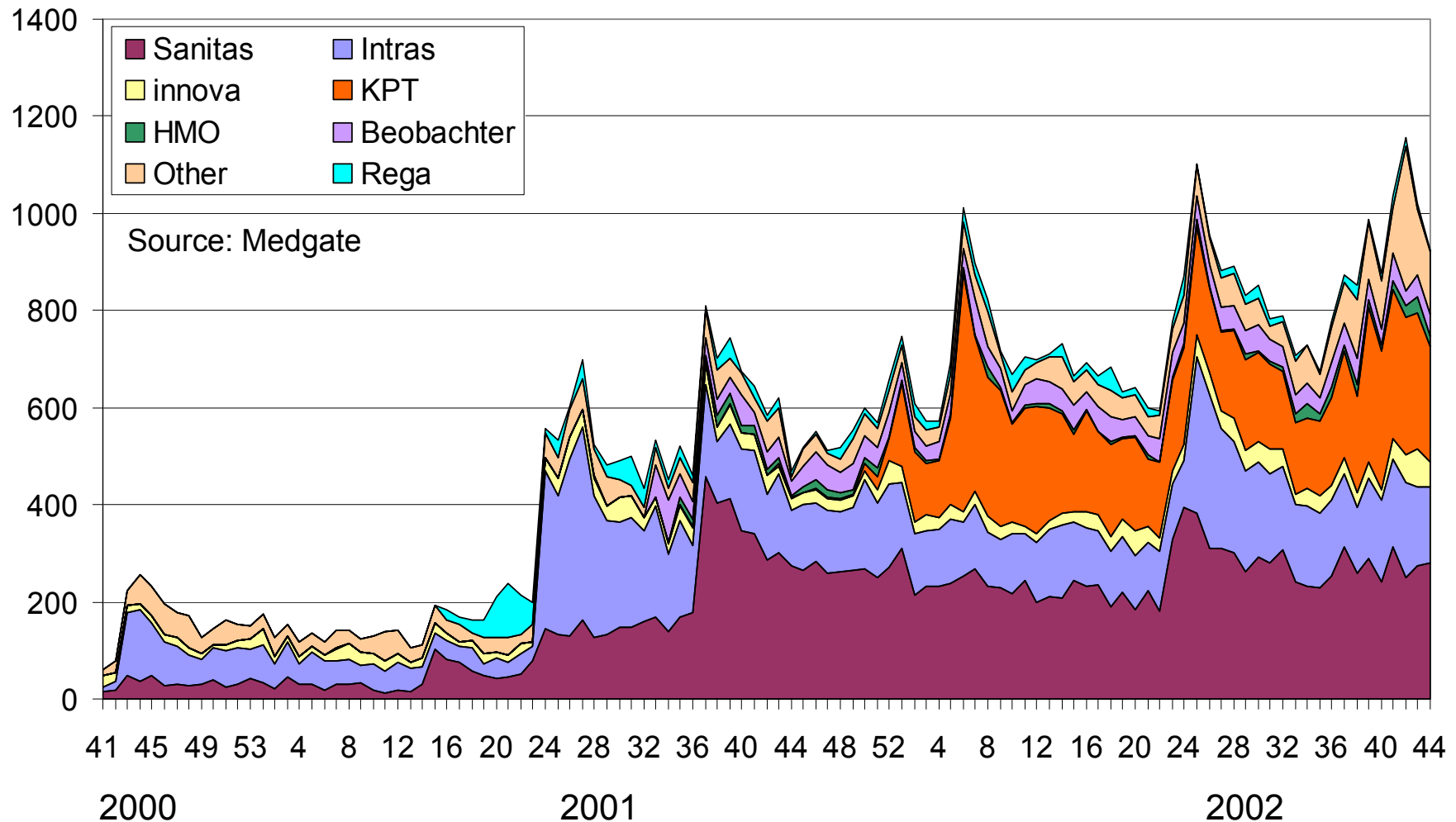
Spezifische Fragen zu Berufsgruppe/Bereich:

Wählen sie im folgenden alle zutreffenden Punkte (Mehrfachauswahl mit CTRL+Click möglich)

Wählen Sie bitte einen Verantwortungsbereich

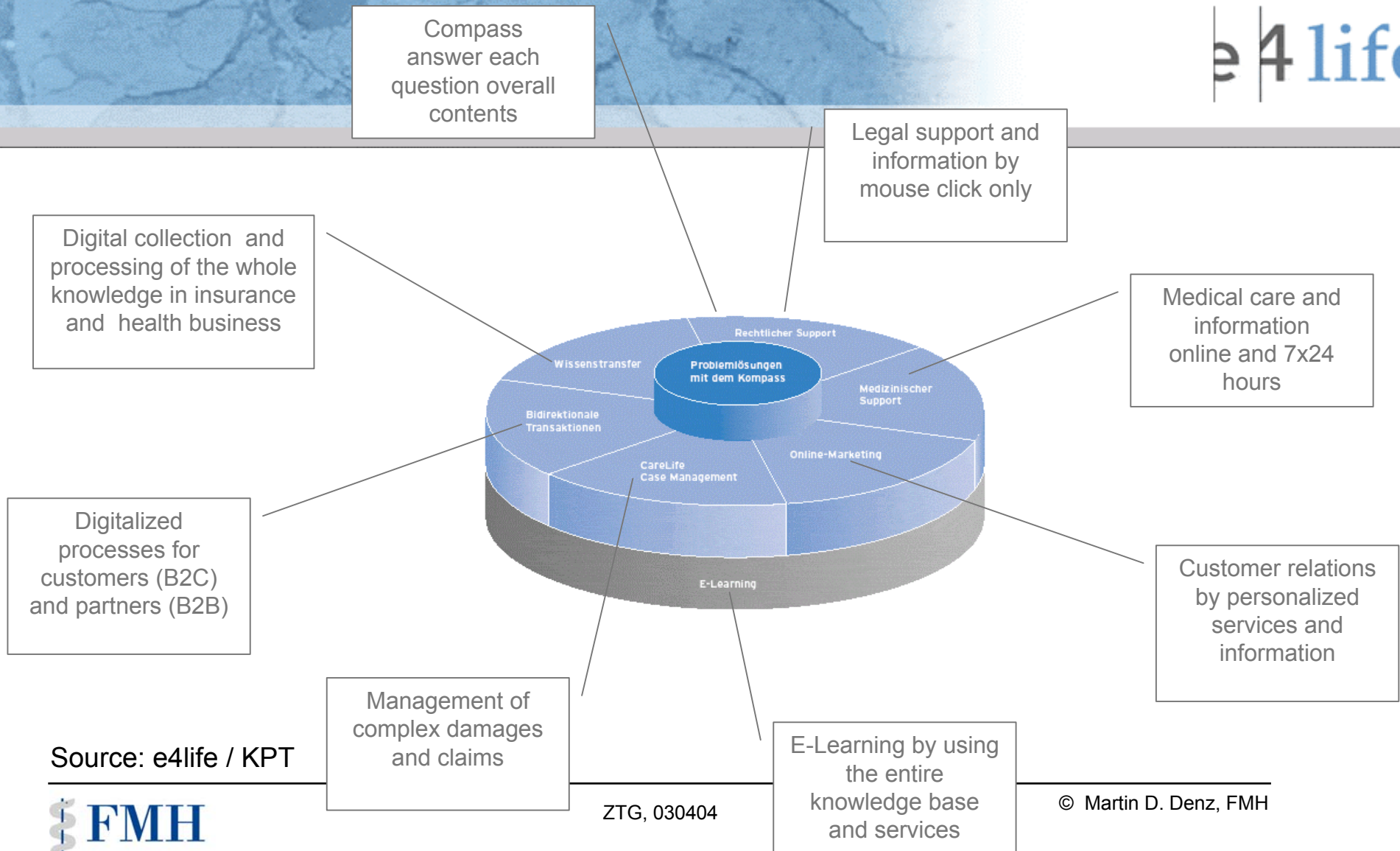
Berufsgruppe des Verantwortlichen/Verursachers

Growing Demand for Call-Centers



Insurers as Service Providers

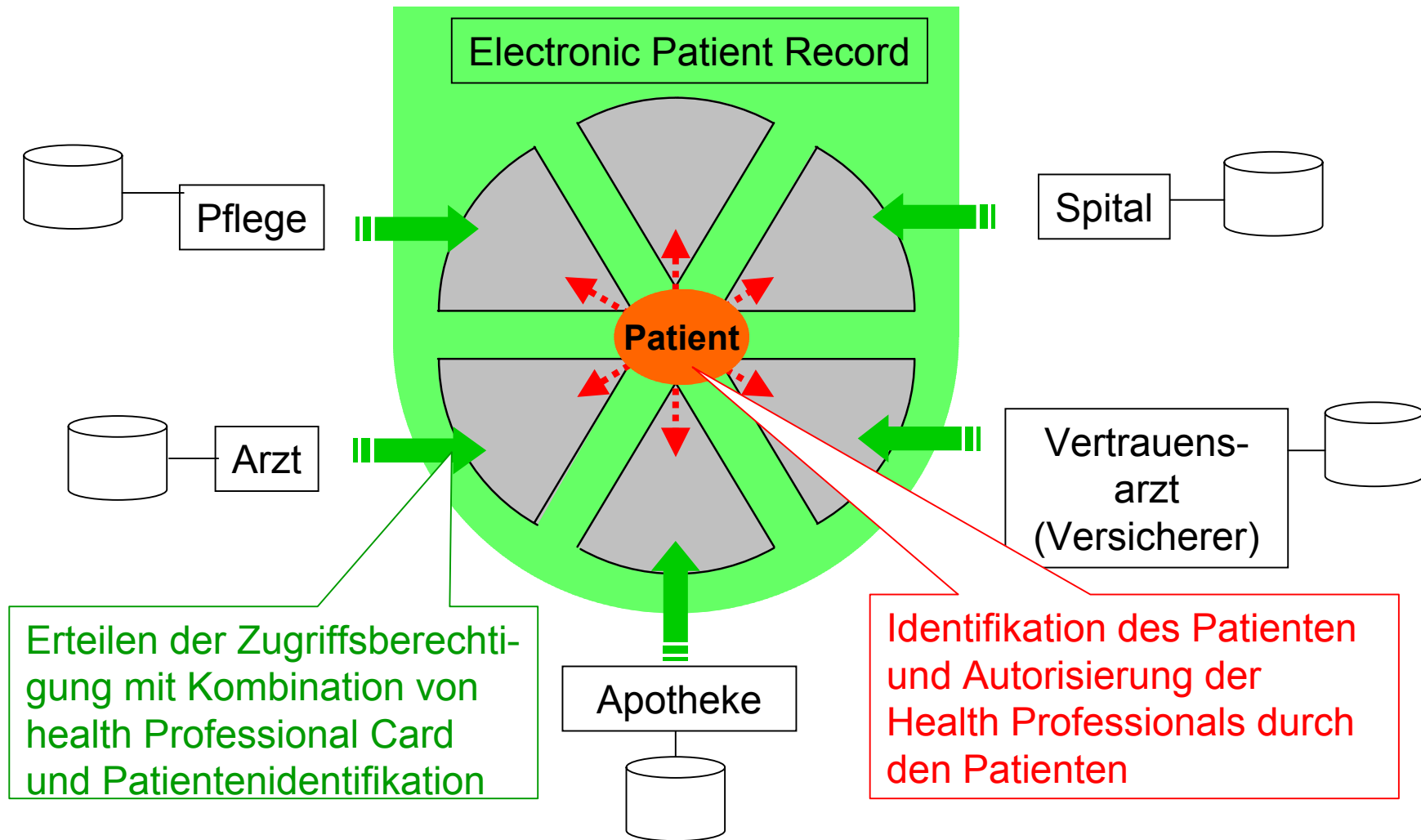
e4life



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Patients: Real Data Ownership



Electronic Health Card

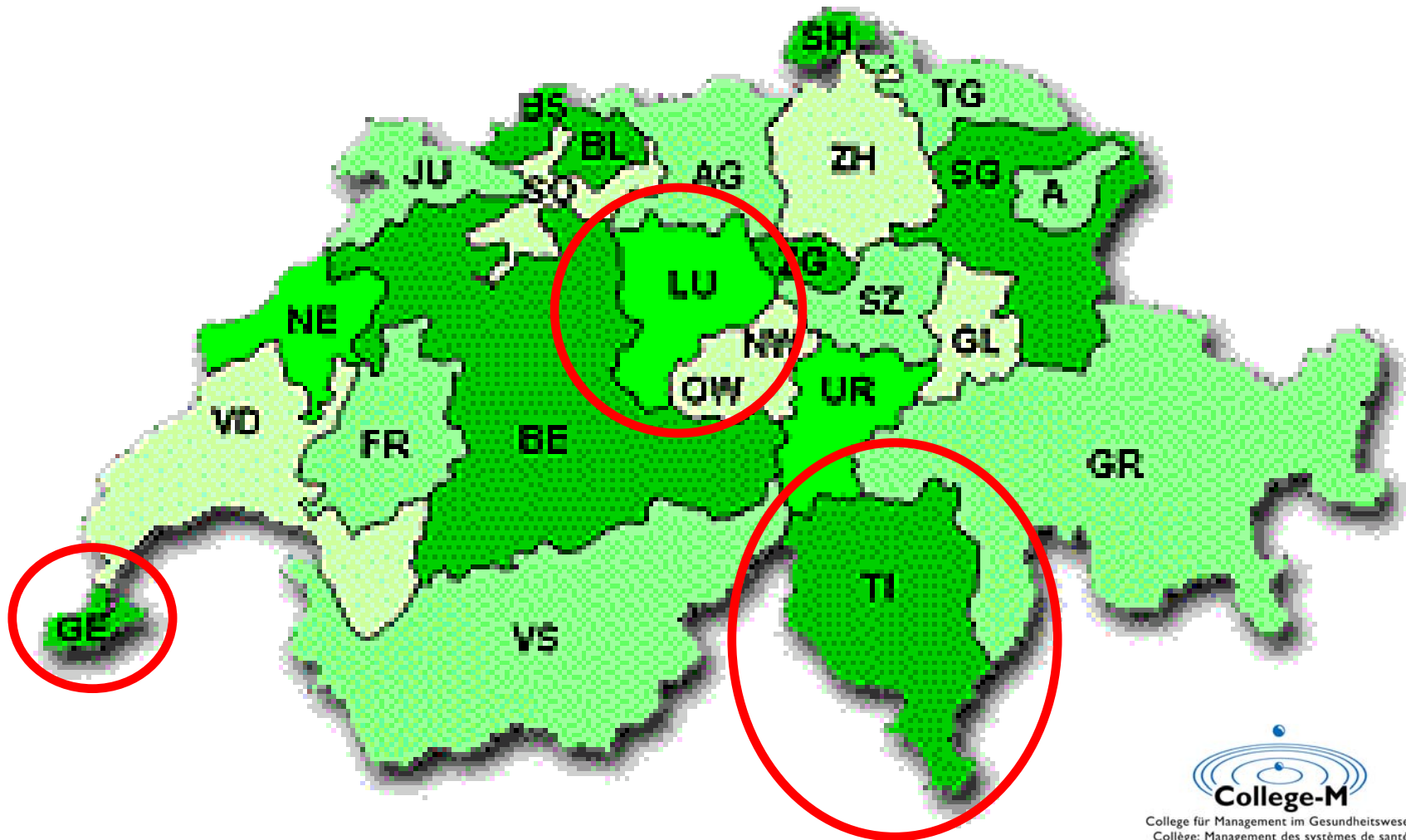
Before Fall 2002:

- ***Patient Card & Health Professional Card***
- ***Access Card, no medical information***
- ***No link with Social Security ID***

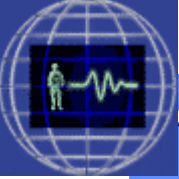
Since Fall 2002:

- ***Health Insurance Card***
- ***Parlament rejects revision of KVG***
- ***Still waiting for a national card solution...***

Introducing Electronic Health Card



College für Management im Gesundheitswesen
Collège: Management des systèmes de santé



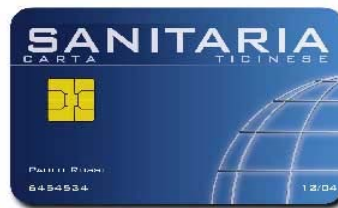
Tessin: Rete Sanitaria - Trial Phase

Source: I. Cassis & M. Della Santa

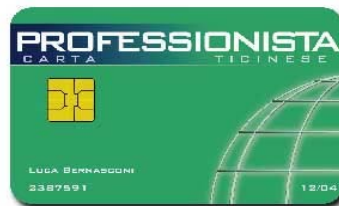
Region chosen: Town of Lugano and Surroundings



- **Pharmacies**
 - 50 Pharmacists
 - 100 Pharmacists' Assistants



- **Ambulances**
 - 2 Emergency Physicians
 - 20 Ambulances



www.retesan.net

3'000 Patients

- **Practitioners**
 - 40 General Practitioners
 - 40 GPs' Assistants

- **Hospitals**
 - 50 Physicians
 - 100 Nurses
 - 30 Administrative Staff

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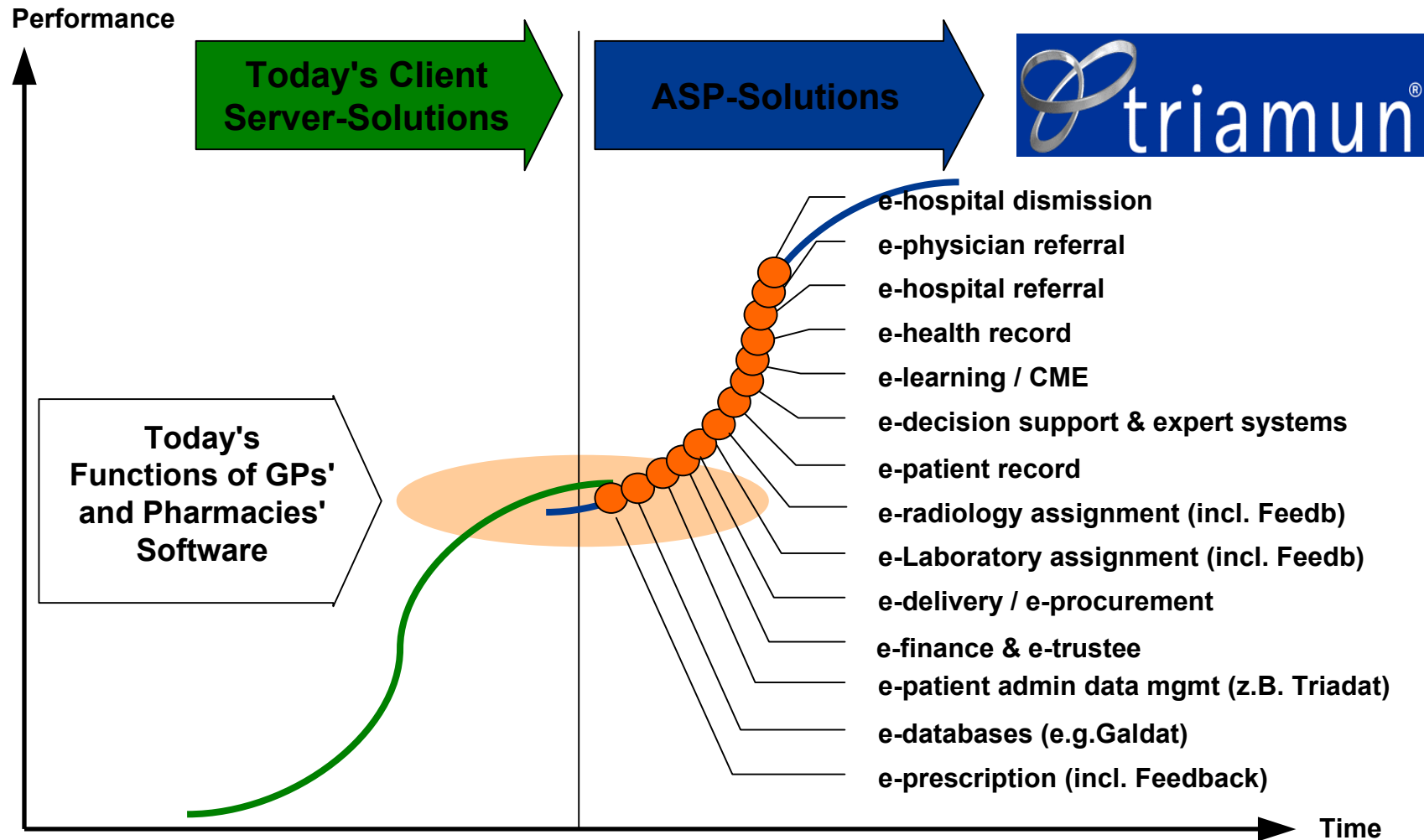
University Hospitals: Project UNIT

Results 1999-2002

- **There are technical solutions available**
- **priority to communicability of information**
- **needs for shared standards**
- **needs for a clear communication framework**



Seeking for Process-Integration



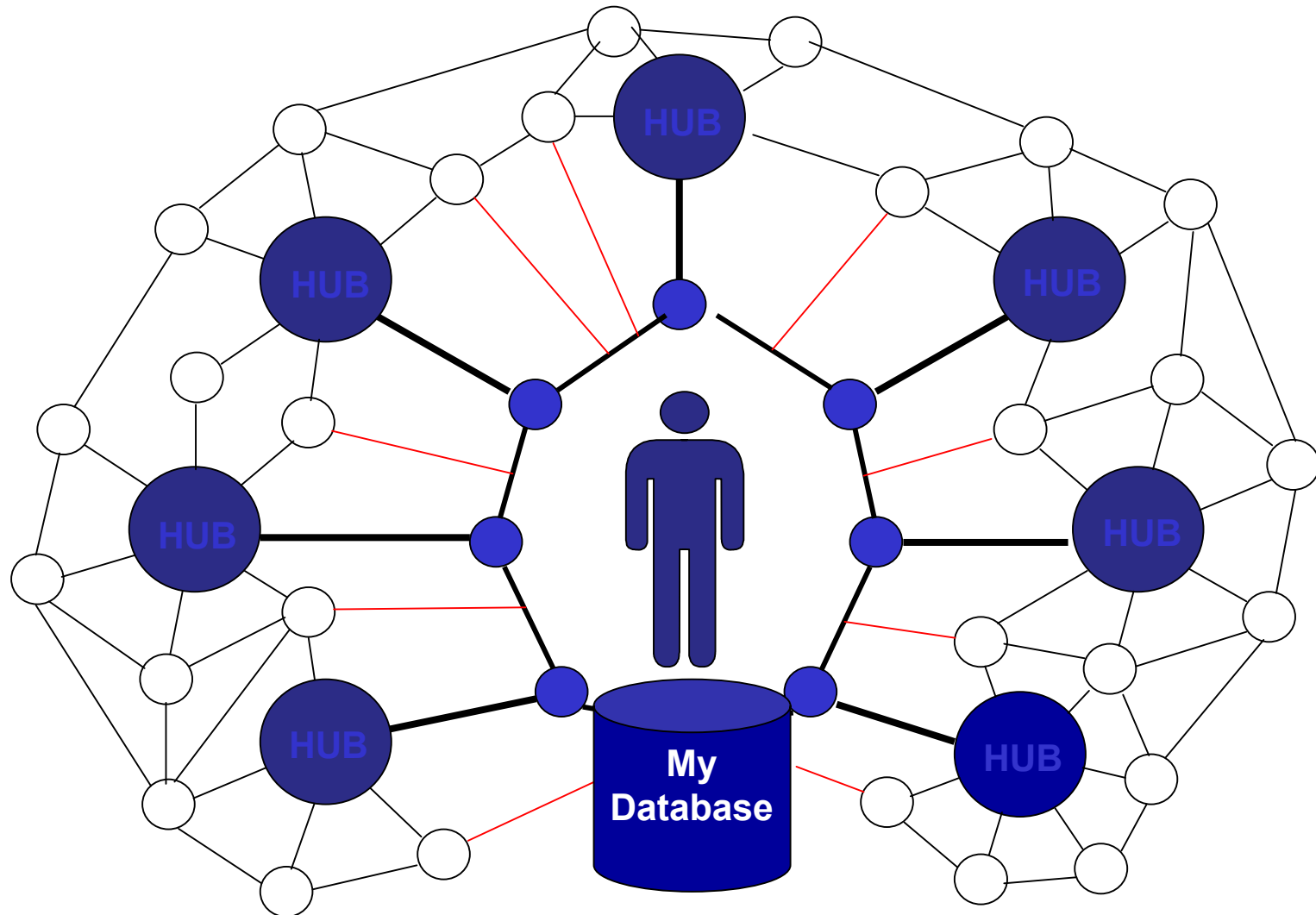
Source: triamun® - managing healthcare

Bottom-up Activity: complS

Association for Compatible Medical Practice Information Systems:

- ***Standardization and process optimization***
- ***Interoperability between stakeholders***
- ***Primary point of care as the starting point of patients' clinical process***
- ***Role of GP as the process-coordinator***
- ***Evaluation: needs and certification of information systems in ambulatory care***

Paradigm Shift

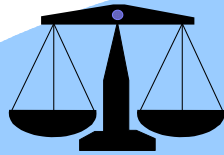


From Virtual Patient Record to...

Laboratory Results



Dispensed Medication



Personal Health Record

Personal Information	
DOB: 01/01/1970	Sex: Male
117 00000000	Birth Date: 01/01/1970
John Doe (0000)	Social Security Number: 000 11 2222
117 00000000	Primary Insurance: American
Phone: 000 000 0000	Phone: 000 000 0000
Phone: 000 000 0000	Phone: 000 000 0000
117 00000000	Phone: 000 000 0000
117 00000000	Phone: 000 000 0000
Physician	
First Physician	Second Physician
John Doe (0000)	John Doe (0000)
117 00000000	117 00000000
Phone: 000 000 0000	Phone: 000 000 0000
Phone: 000 000 0000	Phone: 000 000 0000
117 00000000	117 00000000
117 00000000	117 00000000
Emergency Contacts	
Elizabeth (0000)	Michael (0000)
117 00000000	117 00000000
Phone: 000 000 0000	Phone: 000 000 0000
Phone: 000 000 0000	Phone: 000 000 0000
117 00000000	117 00000000
117 00000000	117 00000000
Vital Information	
Street Type	Address
117 00000000	117 00000000
Insurance	Medical History
117 00000000	117 00000000
Medication	Procedures
117 00000000	117 00000000
Allergies	Family Medical History
117 00000000	117 00000000
Family Medical History	High Blood Pressure
117 00000000	117 00000000

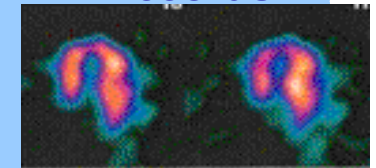
Physician Medical Record



Clinical Medical Records



Specialised Medical Records



Implant Profile



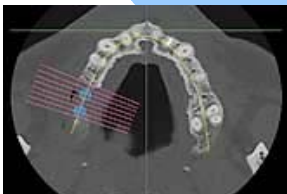
Integrated Electronic Medical Record



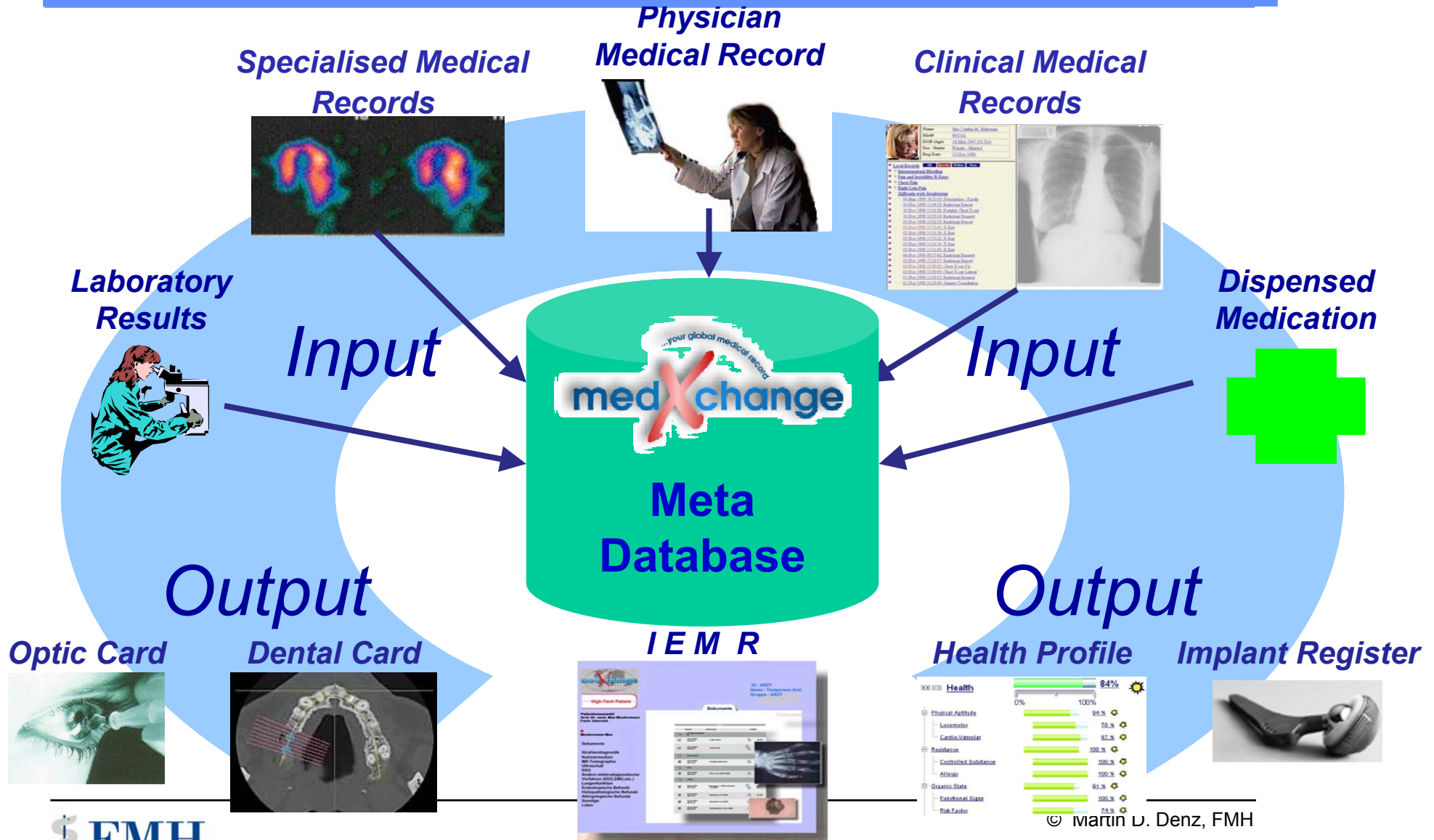
Optic Card



Dental Card



...to Patient-centric Meta Database



Thank you for sharing knowledge!



Building a Transnational Hub



Zürich, October 16-17th 2003

- ***Problem analysis***
- ***Solution concepts***
- ***Practical solutions***

Creating a Societal Discourse



**world summit
on the information society**
Geneva 2003 - Tunis 2005

December 10-12th 2003

- ***eSociety***
- ***eEducation***
- ***eHealth***

<http://www.itu.int/wsis/>