

CompuGROUP Holding AG



Europe's market-leader for Healthcare-IT

South Africa



Malaysia



Saudi Arabia



USA



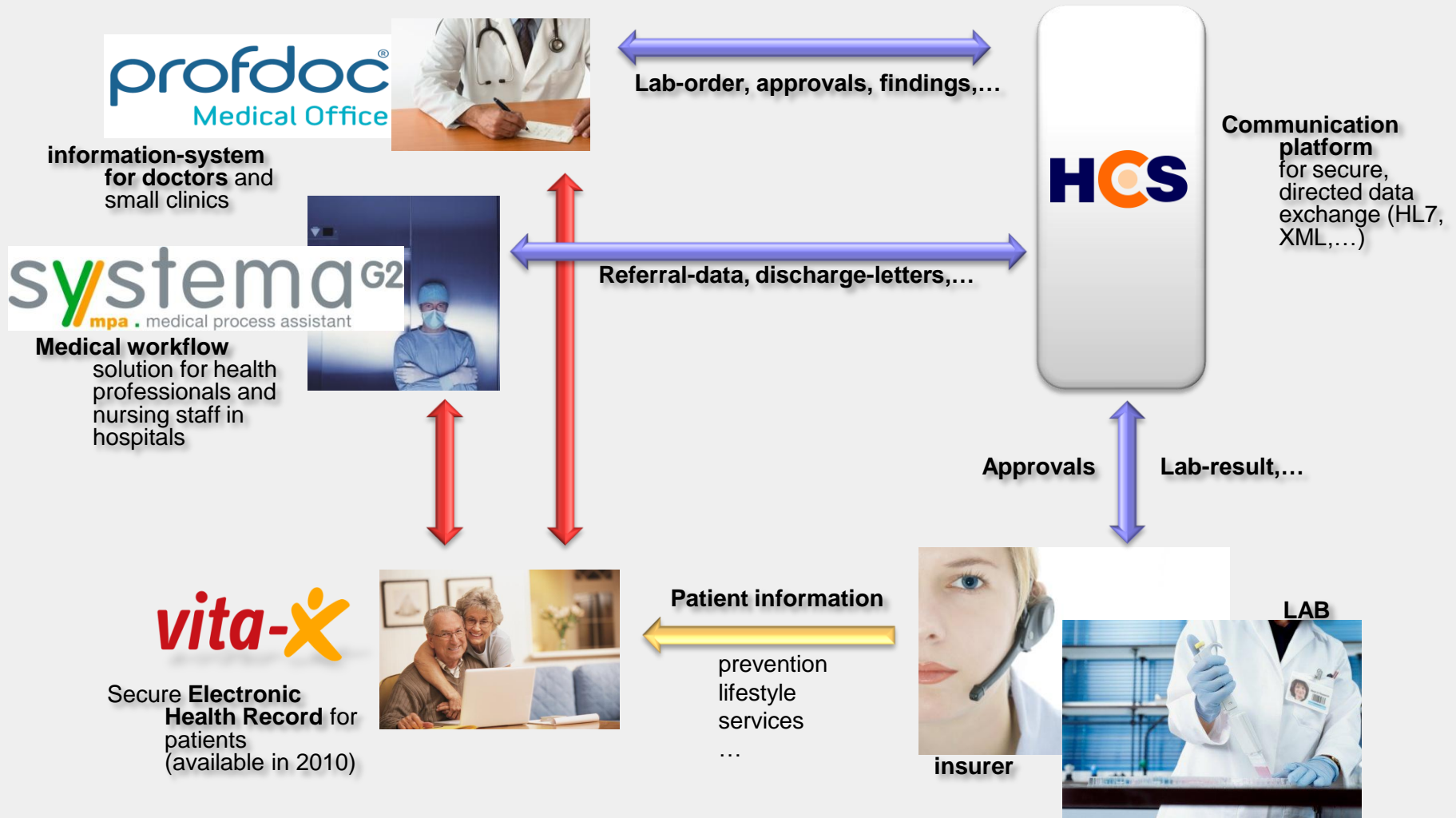
CompuGROUP Holding AG



- **Founded in 1987, Headquarter in Koblenz/Germany**
- **about 2.700 employees**
(Austria, Czech Republic, Denmark, France, Germany, Greece, Italy, Latvia, Malaysia, Norway, Poland, Saudi Arabia, Slovakia, South Africa, Spain, Sweden Turkey and in the USA)
- **about 330.000 customers**
- **FOCUSED on healthcare**
 - **DIS** (doctor information systems ... GPs, Dentists, Specialists,...)
 - **HIS** (hospital information systems)
 - **WFL** (medical workflow solutions)
 - **DSS** (medical decision support systems)
 - **HCS** (communication services, web-portals, data-analysis-services,...)



product-lines for Greece



CompuGROUP Holding AG



**Information System for Doctors and
small Clinics**

CompuGROUP Holding AG

profdoc[®]
Medical Office

Time – is *your* money!



Doctors should focus on their patients, not on paper-based administrative tasks.

- **PMO optimizes the doctor's work**
- **Easy to learn – easy to handle**



CompuGROUP Holding AG



A box full of tools!

- Appointment scheduling
- Patient administration
- Medical-Notes, Documents
- Measurements
- Prescription-Module
- Document-dictation & tracking
- Lab-Order / Results
- ...



CompuGROUP Holding AG

profdoc[®]
Medical Office

**suitable for various
medical fields ...**

... and settings

➤ **Small**

single workplace

➤ **Medium**

office with multiple workplaces

➤ **Large**

clinics, collaborating practices

➤ **General Practitioner**

➤ **Gynaecologist**

➤ **Cardiologist**

➤ **Ophthalmologist**

➤ **...**



CompuGROUP Holding AG

profdoc[®]
Medical Office

The instrument for patient loyalty!

- Know your patient's medical history **IMMEDIATELY**
- Patient reminders (mail, SMS)
- 'branded' print-outs
- ...

Adoptable to your needs!

- customizable
 - Interfaces
 - Reports
 -



CompuGROUP Holding AG

profdoc[®]
Medical Office

Always up-and-running

CompuGROUP supports YOU!

- **telephone & remote support**
- **On-site support**
- **Training**
- **Customization**



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Clinical Workflow System



systema^{G2}
mpa . medical process assistant

focused on professionals



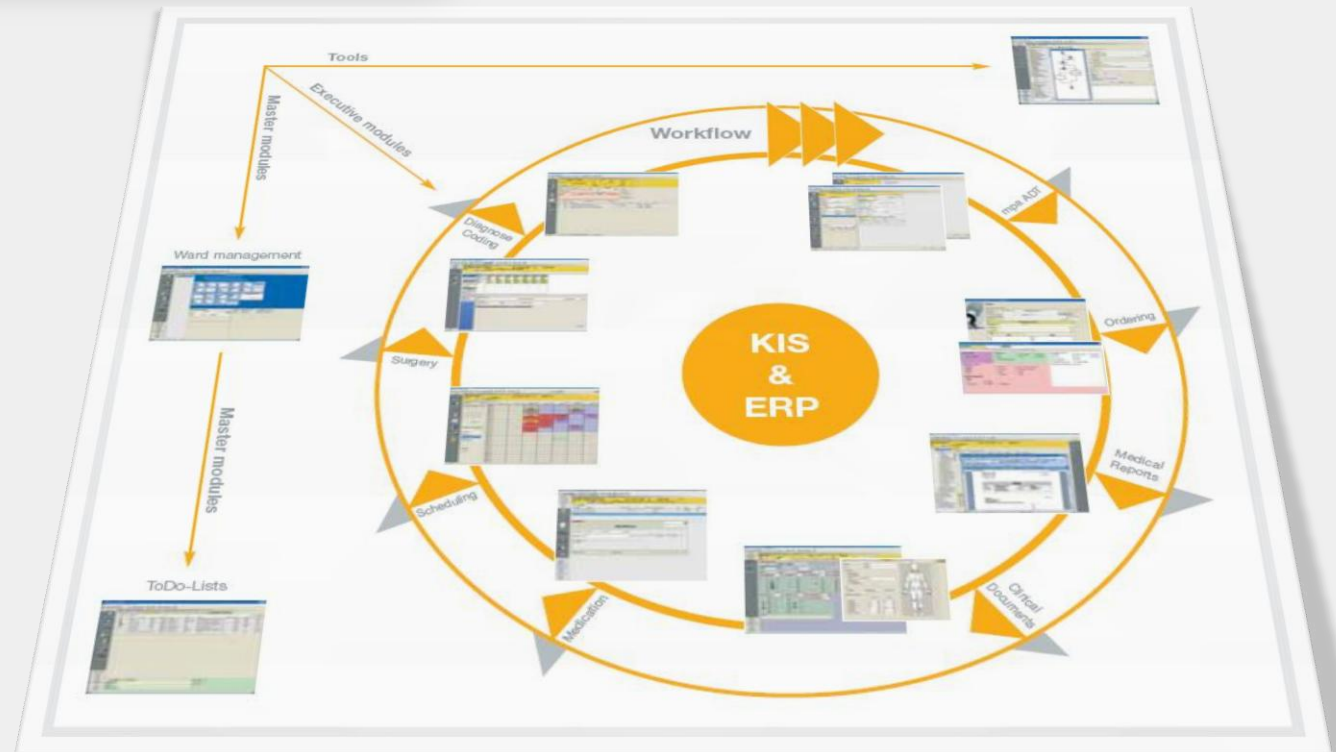
Conventional IT-Systems focus on administrative tasks.

mpa .

is the tool for medical and care-giving staff!

workflow oriented

- Ordering
- Medical reports
- Clinical documents
- Medication
- Scheduling
- Surgery
- Diagnose Coding
- Ward Management
- To-do Lists
- Consolidated Patient-Record



mpa is the tool to control and optimize the clinical workflow.

systema^{G2}
mpa . medical process assistant

integrated

mpa . medical process assistant

ADT & Billing - System

LIS

RIS/PACS

Document Archive

Surgery Planning

...

RIS/PACS

- Siemens
- AGFA
- Philips



SER Document Archive

Meierhofer – **Surgery**

Planning & Documentation



Sanitas – **intensive care**



Philips Speech **Dictation**
& Recognition



Apenio – Care System



DIACOS & KODIP

DRG Grouper modules



... and others

systema^{G2}
mpa . medical process assistant

functional

administer your
patients

Medical Process Assistant

Department Ward ToDo List View Options Help

Administration Admission : MPA : Orthopädie
zuletzt gespeicherter Fall

Patient:
AZ:

Case search Patient search Ward search

Name John
First Name Seagull
DOB
Sex ☐ female ☒ male
Name at Birth
Start search Delete search parameters

Alle Patienten
Name First Name SSN date of birth

Aufenthaltssuche
T AC Az A-Dat. D-date OrgUnit

ambulante Aufnahme
☒ stationäre Aufnahme

Patientenidentifikation
Titel
Name John
First Name Seagull
Name at Birth John
Geschlecht ☐ weiblich ☒ männlich Herr
DOB 12.03.1956
SSN 12.03.1956

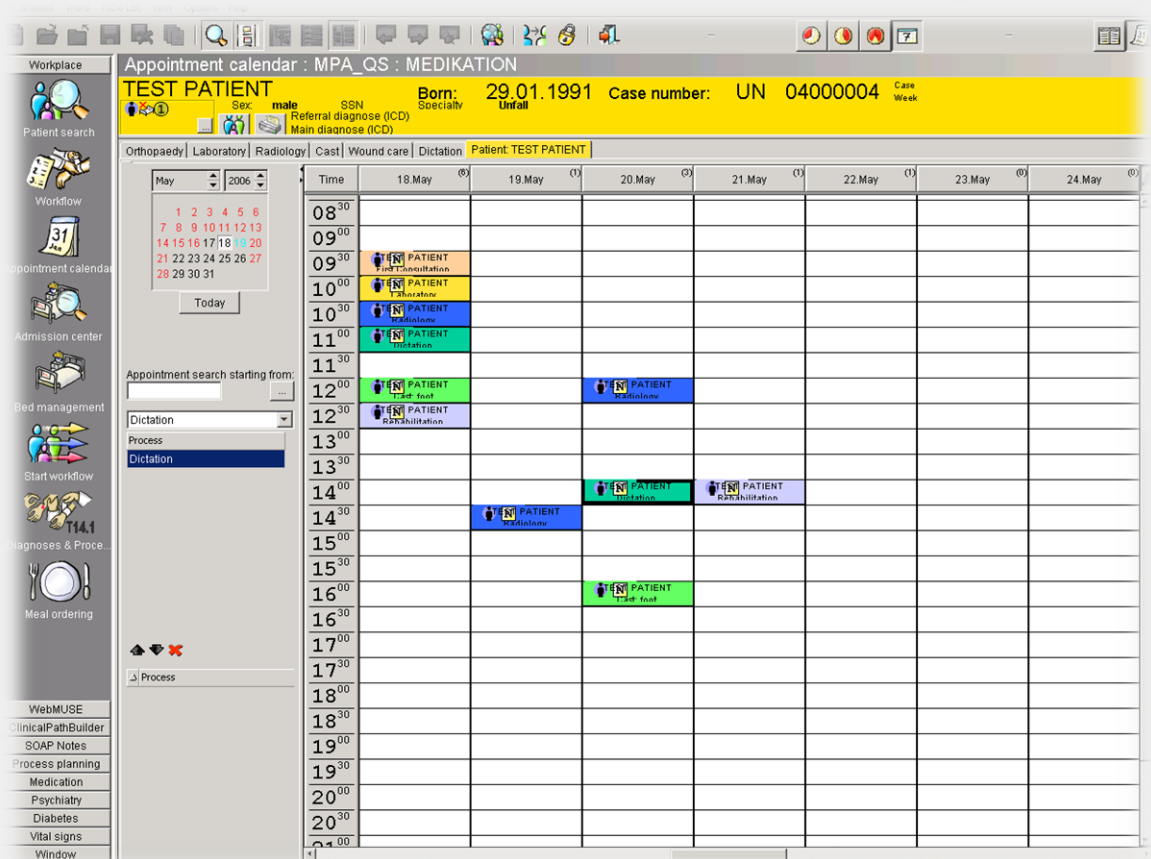
New Case New Case Modify

zurück

systema^{G2}
mpa . medical process assistant

functional

schedule your resources and patients



systema^{G2}
mpa . medical process assistant

functional

manage your wards

The screenshot displays the 'Bed management : MPA_QS : MEDIKATION' interface. The left sidebar contains navigation icons for Patient search, Workflow, Appointment calendar, Admission center, Bed management (active), Start workflow, and Meal ordering. The main area shows a grid of patient cards for four rooms: Room 301, Room 302, Room 303, and Room 304. Each card displays patient names and icons representing different medical services or status. Below the grid, there is a 'Patient / Functions' section with a list of patients and their case numbers, and a 'Ward / Beds Overview' section showing bed status (Current, Min, Max, Free, Occupied).

Room 301: DIENTEN DIETLINDE, WIMMER MARIA, WIMMER TOBIAS, MAYR JOHANN, RUSTLER HORST, TEST AUFNAHME2, VERLETEST DUMPSI, GASTEINER KRISTALLKLAR.

Room 302: WIMMER MICHAEL, ZAUE ZACHARIAS, KOGLER GERHARD, KLEMENT BIRGIT, ROHRBACH RUDOLF.

Room 303: DIENTEN DIETLINDE, WIMMER MARIA, RUSTLER HORST, TEST AUFNAHME2, KOGLER GERHARD, KLEMENT BIRGIT.

Room 304: WIMMER TOBIAS, MAYR JOHANN, VERLETEST DUMPSI, GASTEINER KRISTALLKLAR, WIMMER MICHAEL, ZAUE ZACHARIAS, ROHRBACH RUDOLF.

Patient / Functions:

Case no.	First name
06000049	BÜRMÜLLI KONRAD
06000046	PATZUSGL TESTER
06000083	COCA COLA
06000057	GRÜNNER MARKUS
06000014	FEICHTINGER TOBIAS
06000035	HÖFLER GERDA
06090002	WIMMER EVA
04000085	MÜLLER EMALIA
06000025	HOER ERWIN
06000013	FEICHTINGER ROLAND
05000017	POTTER HARRY
05000052	TEST AUFNAHME

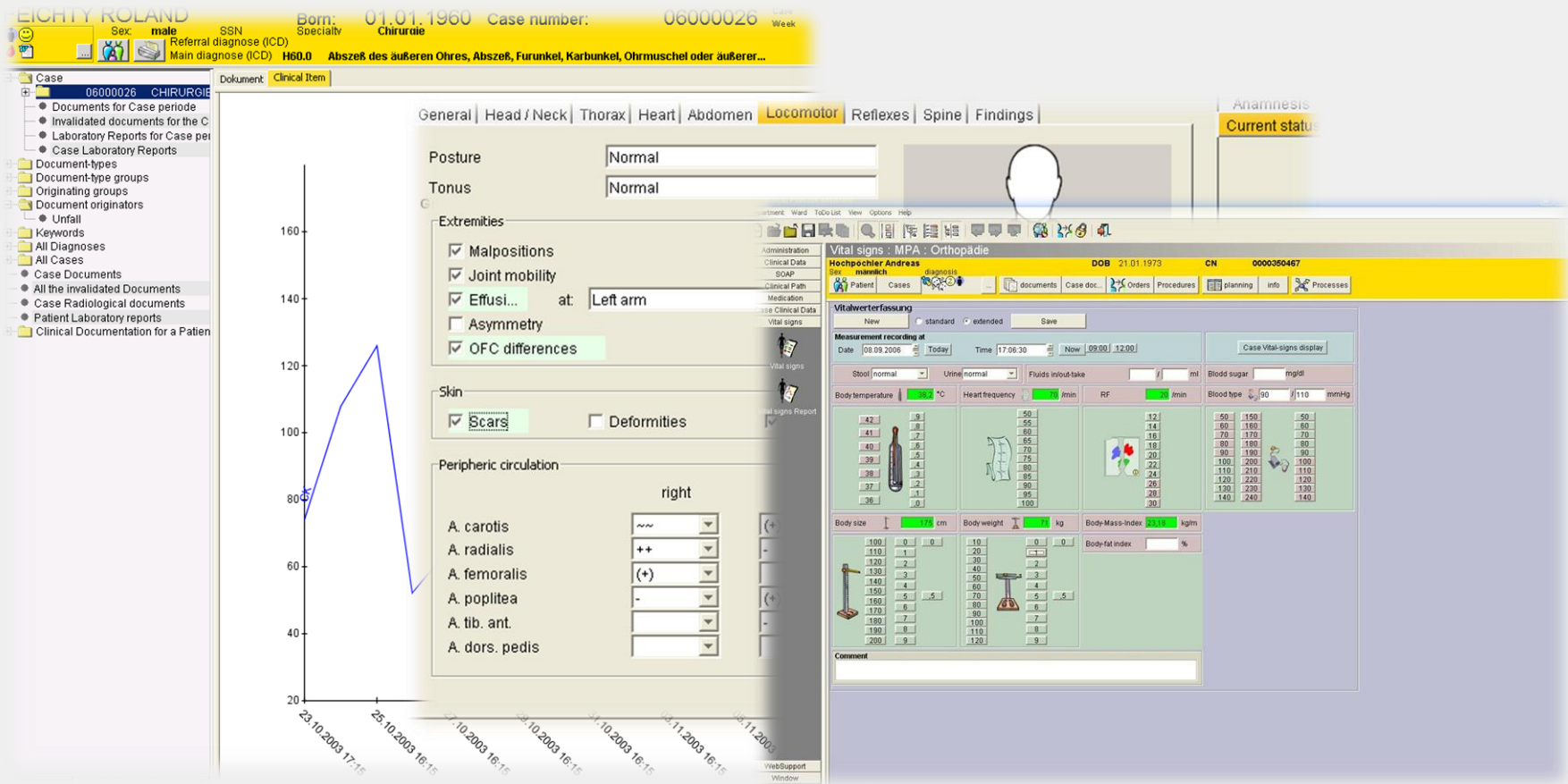
Ward / Beds Overview:

Current	Min.	Max.	Free	Occupied
17	16	20	4	13

systema^{G2}
mpa . medical process assistant

functional

document patient treatment in structured form



have a consolidated view on the patient's medical record

... consolidated view on all available electronic documentation of the treatment process – regardless of the place of storage.

Healthcare needs people who act!

mpa ■

**Provided by Austria's
leading company for
Hospital Information Systems.**

systema
HUMAN INFORMATION SYSTEMS
A CompuGROUP COMPANY

CompuGROUP Holding AG

vita-x



Personal Electronic Health Record

CompuGROUP Holding AG



Security at its best!

... checked &
approved!

- Fully encrypted data-container
- PK infrastructure
- Transport encryption
- Role-based access control
- ...



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Directed Communication

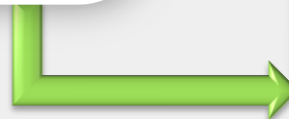
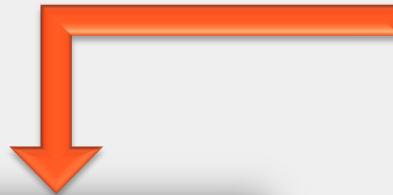
... between Doctors & Patients

... and the insurer



Patient information

prevention
lifestyle
services
messages



CompuGROUP Holding AG



with a convenient patient- interface



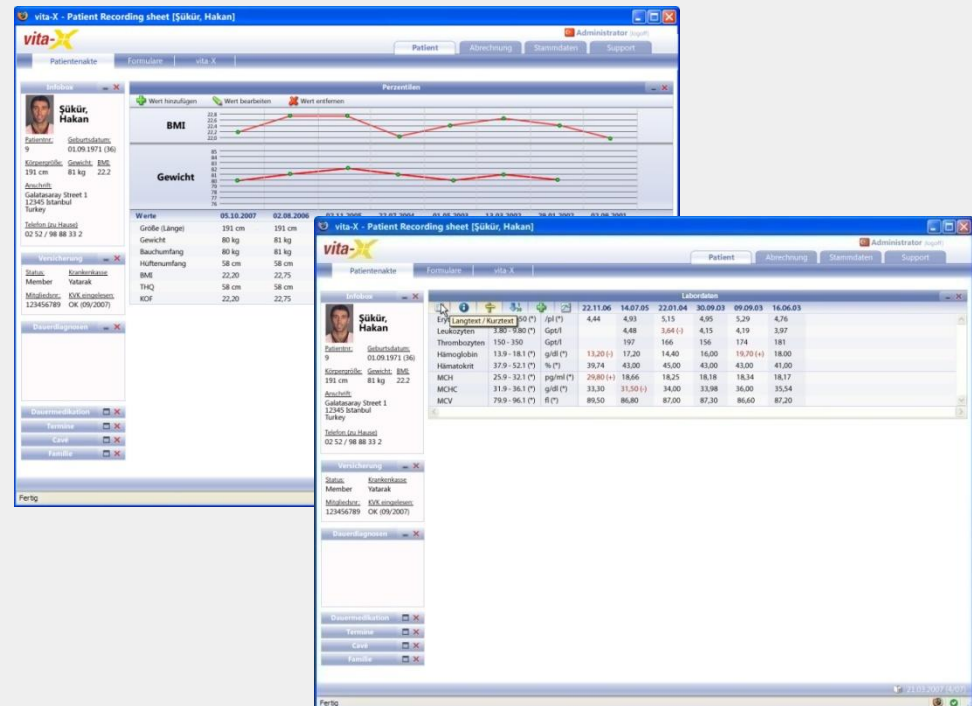
The screenshot shows the vita-X patient interface. At the top, it says "Angemeldet als Petra Frauenrath" with a login and logout option. The main content area is divided into several sections:

- Willkommen, Petra Frauenrath bei vita-X**: A welcome message with a background image of a field and a blue sky.
- Gesundheitsagent**: A section for the patient's medical history, including a stethoscope icon and a link to "Medizinische Vorgeschichte".
- Ihr Impfstatus**: A section for the patient's vaccination status, showing "nicht in Ordnung" (not in order) and a link to "Impfpass".
- Ihre Nachrichten**: A list of messages from doctors, including "12.03.2009 | Dr. med. Dietmar Albach" and "12.03.2009 | Dr. med. Karin Damen".
- Aktuelles**: A section for current news, including "18.01.09" and "13.01.08" with headlines about the News-System and a warning about the flu.
- Med. Vorgeschichte**: A link to the patient's medical history.
- Kontakte**: A link to the patient's contacts.
- Notfalldaten**: A link to the patient's emergency data.
- Mein Profil**: A link to the patient's profile.
- Ihre nächsten Termine:**: A list of upcoming appointments, including "12.05.2009 | 14:30" and "12.09.2009 | 08:30".
- Ihre vita-X Hotline**: A section for the patient's hotline, showing the number "0261/ 8000-1111" and the email "info@vita-x.de".

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.... and easy to use for doctors



... integrated into the DIS

CompuGROUP Holding AG



The TOP of the pyramid!

EHR



Network &
Communication
Infrastructure



Primary Systems
(DIS, HIS,...)



Access to my Doctor





CompuGROUP

HOLDING AKTIENGESELLSCHAFT



vita-x



gi9 portal technology

- Web based
- J2EE technology
- 3-tier open architecture
- Open Source utilization
- High availability & scalability features
- Standardized application container
- Supports
 - ✓ Linux, Unix, Windows
 - ✓ MySQL, Oracle, SQL Server
 - ✓ Tomcat, Jboss, Oracle





Fraud - Verax List ©

**management of insured data e.g.
contract data and supplementary payment status**

Fraud in the health care system

Most health care systems are open to abuse.

Examples for Germany:

- „black-markets“ for health-insurance-chipcards.

Loss in the German health care system each year: Minimum 800.000.000 €

- Doctors and pharmacists work together and prescribe drugs for „phantom-patients“

Loss in the German health care system each year: several hundred thousand €

- Pharmacists manipulate prescriptions with their software

Loss in the German health care system : 26.000 € for one pharmacist

- Patients are lying on their social-status. So they obtain the additional payments fraudulently (e.g. for drugs).

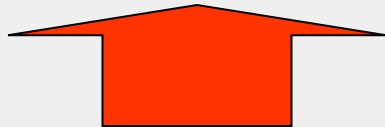
Loss in the German health care system each year: 250.000.000 €

Innovative solution approaches

The 2 functions of the Verax list®

Suspension of health insurance cards

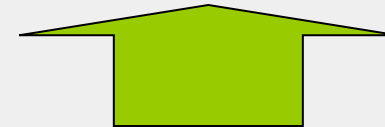
- Cards held by those switching insurance company
- Cards reported as lost/stolen
- Cards replaced by new care provider (e.g. health insurance merger)



Negative list

Checking of exemption from co-payment

- Flagging of those insurants with exemption from the supplementary payment requirement – with end date



Positive list

Example: Stopping invalid chip cards

Ungültige Versichertenkarte

Online-Prüfung / Versichertenverhältnis

Laut GKV-Rückmeldung besteht ein gültiges Versichertenverhältnis

Verax-Liste / Kartenprüfung

Laut GKV-Daten ist die eingelesene KV-Karte seit dem 01.01.2005 nicht mehr gültig. Bitte lassen Sie sich eine aktuelle Karte geben.

Bei Rückfragen wenden Sie sich bitte an die GKV unter 0800 / 11 22 33

Weitere Vorgehensweise

☐ Patient wird nicht behandelt

☐ Patient wird behandelt

☐ Neue Versichertenkarte einlesen

☐ Manuelle Eingabe der Versichertendaten

☐ Privatabrechnung

☐ Überweisung liegt vor

☐ Patienteninformation

Helfen Sie mit, dem Chipkartenmissbrauch entgegen zu treten.

OK

optional: real online check
of the insurant's health cover status
= VeraxConnect⁺

Validity of the health insurance
card is conducted
offline or
online

Doctor has 4 options in cases of
requested treatment:

- Read in new health insurance card
- Manual entry of the insurant's details
- Private patient-based invoicing
- Referral note is presented

Example: Checking of supplementary payment status - medications

Rezept für Patient <Merzel, Klaus> bedrucken

Gebühr frei ☐ **VdAk** ☐

Name, Vorname des Versicherten
Merzel Klaus geb. am **15.04.1971**

Sonstige ☐ **Süßkindstraße 1**
51107 Köln

Kassen-Nr. **4080005** **Versicherten-Nr.** **442065267890** **Status** **1000 M**

Vertragsarzt-Nr. **1899999** **VK gültig bis** **09/07** **Datum** ☒ **16.05.2003**

BVG ☐ **Hilfsm.** ☐ **Impfstoff** ☐ **Spr.-St.-Bedarf** ☐ **Heilm.** ☐ **BTM** ☐

Dauermedikamente

EUR 6,95 Glibenclamid-ratio 3,5 120 Tbl. N2
 EUR 61,92 Rocornal 200mg Kaps. 100 Kaps. N

Anzeige/Werbung

EUR 6,64 GLIMIDSTADA 3,5 Tabl. 120 St N2

Verschreiben **Löschen** **Wiss. Inf...**

aut idem	Menge	Medikamente :	Zusätze	Morg.	Mittag	Abend	Nacht	Dauer	kl.Liste
<input type="checkbox"/>			...						
<input type="checkbox"/>			...						
<input type="checkbox"/>			...						
<input type="checkbox"/>			...						
<input type="checkbox"/>			...						
<input type="checkbox"/>			...						

☐ Nur Einnahmeverord.

OK **Spooler** **Abbruch** **Alte Rezepte...**

- Information relating to supplementary payment exemption is stored in patient master data as standard
- Through the use of the Verax list this is checked – in discrepancy cases, a corresponding message is generated

Example: Checking of supplementary payment status - medications

Rezept für Patient <Merzel, Klaus> bedrucken

Gebühr frei ☒ VdAk ☐

Notcu ☐

Sonstige ☐

Unfall ☐

Arbeits-unfall ☐

Name, Vorname des Versicherten
Merzel
Klaus
Süßkindstraße 1
51107 Köln

Kassen-Nr. 4080005
Versicherten-Nr. 442065267890
Vertragsarzt-Nr. 1899999
VK gültig bis 09/07

BARMER 00038

BYG Hilfsm. Impfstoff Spr.-St.-Bedarf Heilm. BTM
☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐

Dauermedikamente
EUP 0.05 Alkoholdosis 2.5.120 Th N2

aps. f

erbung
St N2
nf...

klListe

verord.

aut idem Menge Medikament

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

OK

Prüfung der Zuzahlung

Zuzahlungsüberprüfung

Laut GKV-Daten besteht zur Zeit keine gültige Befreiung von der Zuzahlung.

Bei Rückfragen wenden Sie sich bitte an die GKV unter 0800 / 11 22 33

Weitere Vorgehensweise

☐ Gebührenbefreiung ablehnen

☐ Gebührenbefreiung akzeptieren

☐ Kasse bestätigt Zuzahlungsbefreiung

☐ Befreiungsausweis liegt vor

☐ Patienteninformation

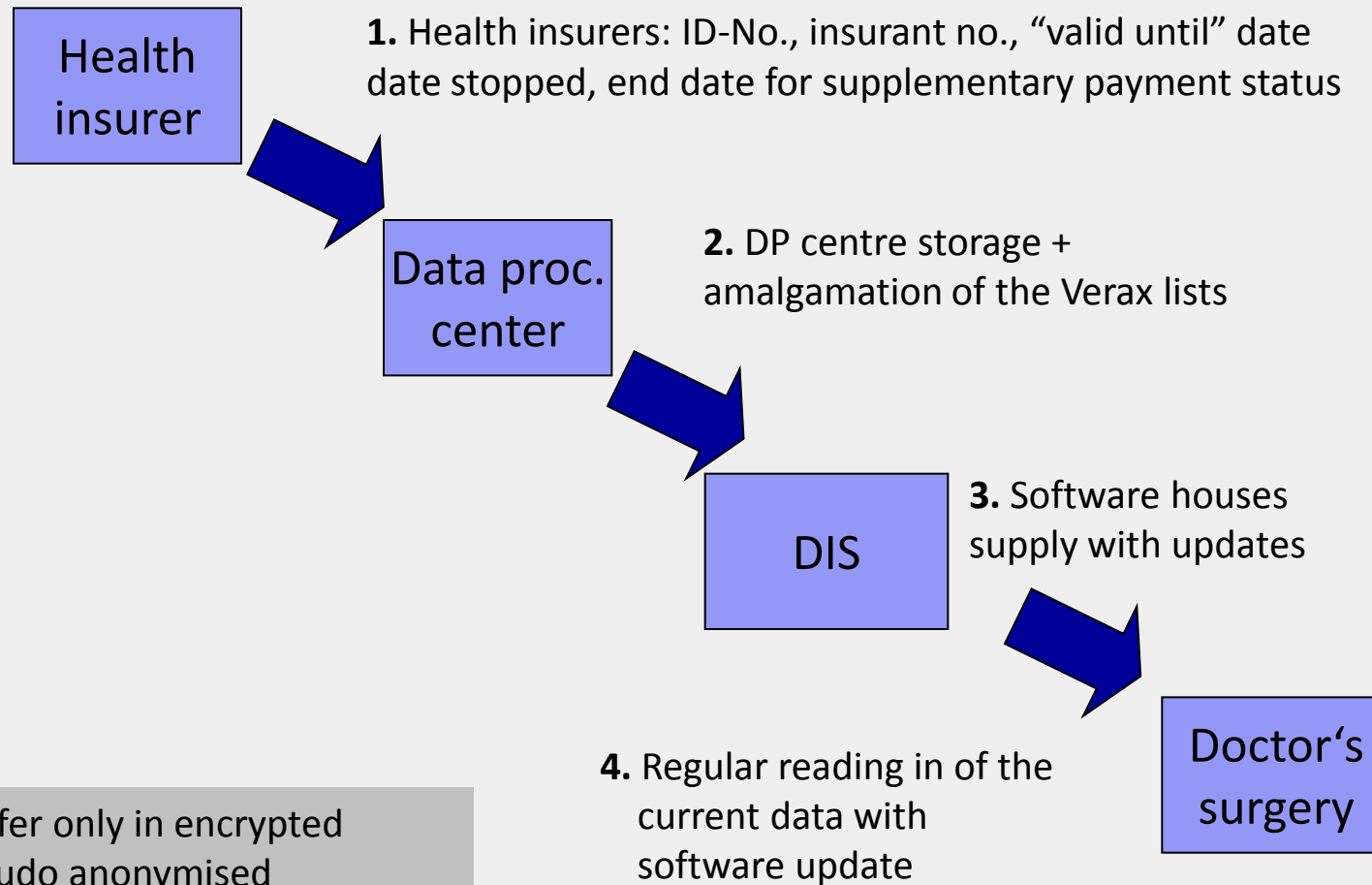
Helfen Sie mit, die Beitragsgerechtigkeit zu sichern.

OK

→ Checking of supplementary payment status is conducted offline or online

→ if the health insurance company confirms the exemption, or if the patient can produce an exemption confirmation, the entry remains on the prescription form

Data maintenance procedure – current process



Data transfer only in encrypted
form+ pseudo anonymised
(Clearance – Federal data protection
office)



Verax stand-alone for hospitals

VERAX

Kartendaten

Name: Mal , Micha

IK-Nummer: 6777506

Versichertennummer: 1010707636

Gültig bis: 0606

Information zur Krankenkassen

Krankenkasse

Telefon bei gesperrten Karten:

(0800) 21 00 21

(Für Sie kostenlos)

Telefon bei Zuzahlungsbefreiung:

(0800) 22 00 22




(Für Sie kostenlos)

Kartenprüfung

Zuzahlungsprüfung

Karte gelesen: Letzter Gültigkeitsmonat 1/2006. Letzter Befreiungsmonat 1/2006.

Abbrechen Einstellungen Schließen

-  Card suspended / No exemption from suppl. payment
-  Health insurer does not participate
-  Card has not been stopped / Exempted from suppl. payment

Innovative solution approaches

Statement by the executive chairman of the Techniker Krankenkasse (health insurer) after two years of using the Verax list*:

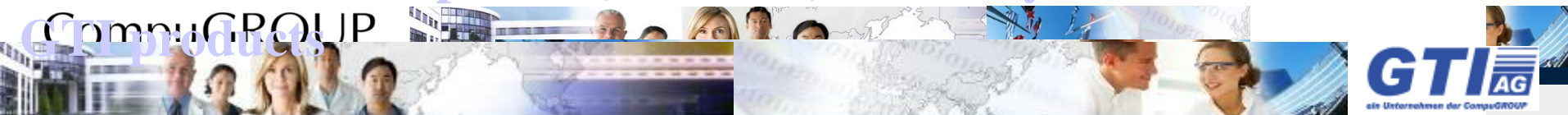
[...] “We decided in favour of the Verax list because the application paid for itself within just a few weeks. The money we spent on the software and for the introduction of the Verax list has long since been recouped in the form of avoided fraud,” highlights Norbert Klusen, executive chairman of the Techniker Krankenkasse. Unlike the Techniker, other health insurers are waiting for the electronic healthcare card [...]

*** DasErste.de - [plusminus – card misuse (02.05.2006)]**

(<http://www.daserste.de/plusminus/beitrag.asp?uid=v43g7dpmu5gbz753&cm.asp>)

104 insurance companies (from 231) currently use

GTI products



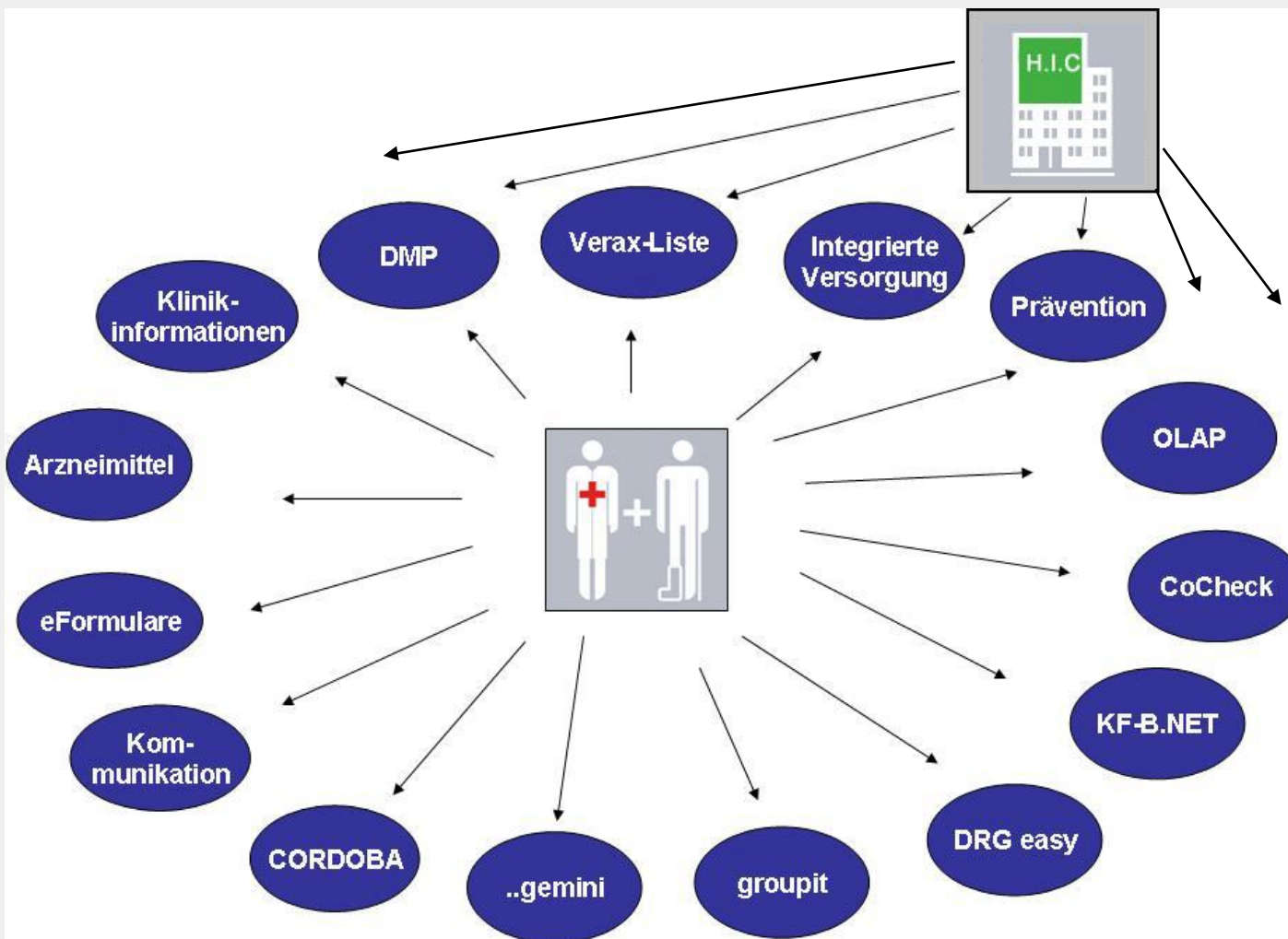
Synchronizing the World of Healthcare

- **DAK** (7.2 million insurants)
- **TK** (6.1 million insurants)
- **AOK Bayern** (4.4 million insurants)
- **AOK Baden-Württemberg** (4.2 million insurants)
- **AOK Niedersachsen** (2.2 million insurants)
- **AOK Hessen** (1.5 million insurants)
- **GEK** (1,1 million insurants)
- and BKK VBU, BKK BVM, BKK HMR, BKK Schwenninger, BKK Heilberufe, BKK mhplus, BKK Bayer, IKK Brandenburg, hkk, MHK, BKK 24, AOK Sachsen, AOK Thüringen, AOK Mecklenburg-Vorpommern, AOK Rheinland, DKV, Consal...

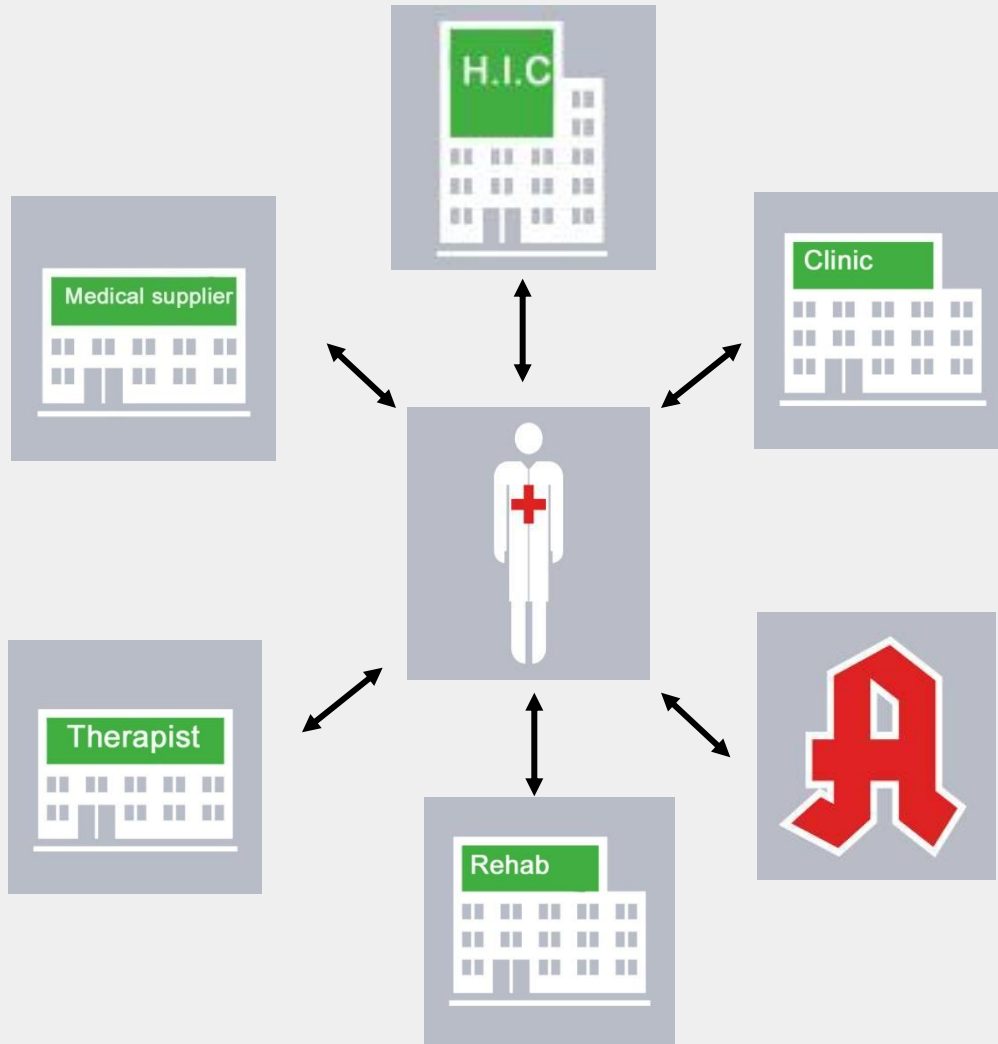


GTI customers represent 43 % of all healthcare insurance holders in Germany

Spectrum of services offered by CompuGROUP



Our doctors are the „Key to the healthcare system“



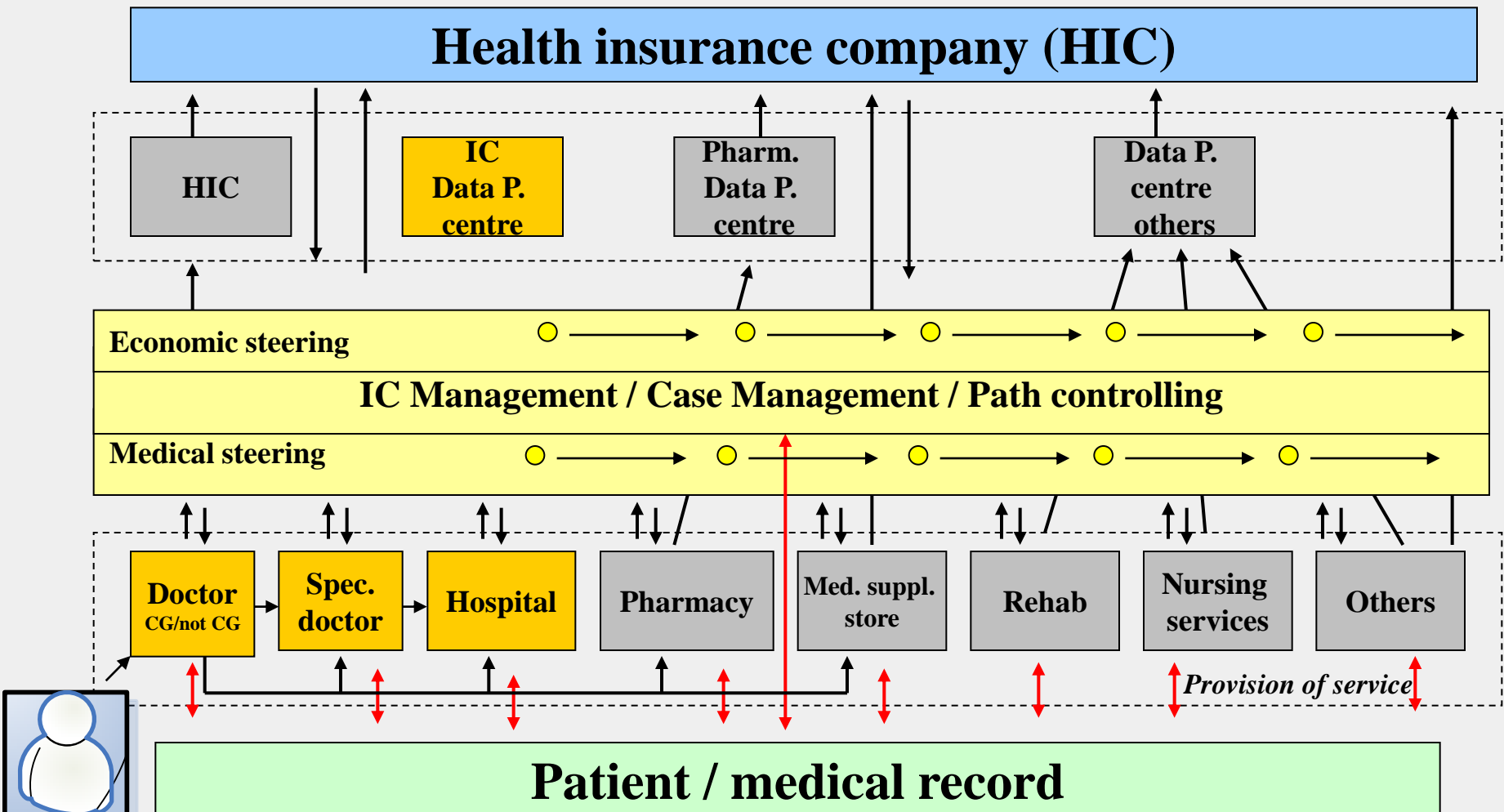
physicians are responsible for:	... in % of total HC cost
➤ hospitalisation	33%
➤ drugs	15%
➤ treatment	14%
➤ sickness benefit	8%
➤ technological aid	8%



78% of total HC costs are directly influenced by the physicians !



Innovative solution approaches towards the management of health
restoration
and
health maintenance processes





Objectives

1. To safeguard / improve the quality of treatment of care-relevant common illnesses and diseases through

- Detection of the initial stages of an illness and implementation of early therapy
- Avoidance of a deterioration in a patient's state of health
- Provision of structure and process quality with the aim of achieving a higher quality result
- Promotion of patient compliance
- Improvement of patients' quality of life
- The treatment of patients, employing the most cost effective and treatment effective level of care within the system as well as the avoidance of duplicate examinations



2. Improvement in the cost effectiveness of treatment for care-relevant common illnesses and diseases through

- Process optimisation
 - Procurement optimisation
 - Acquisition and maintenance of target group customers
 - The reduction of the health burden of insurants
-
- Safeguarding the sustainability of quality and cost effectiveness of care as well as efficiency improvements
 - Improvement of the coordination and cooperation between the contracted doctors from the various specialities as well as between the different sectors of care



Care assignment and services content via patient paths

- The **course of the medical care** for the individual illness profiles is described in **patient paths**.
- IC case management is the organisation and the technical infrastructure with IT solutions containing software with integrative interfaces to the management company and to the cost bearer, which builds on the doctor's software.



- **Illustration** of the regional **health partner networks** taking part in this contract that use the IC software
- **Identification of the patient potential** in doctors' surgery software using the inclusion criteria of the patients and automatic identification of these patients (candidate scanner)
- **Electronic administration/handling of the contract**
Registration, documentation, invoice handling, identification of the contracted health insurance company. Receipt of external newsletters concerning the contract etc. with reminder function and data exchange with third parties.
- Using **support functions in the interactive patient path software**, the path steps for each health partner network are shown with a monthly budgeted/ actual comparison enabling corresponding evaluation and control.
- **Benchmark reporting**, which, building on the monthly reporting, enables the IC contract partner to check the patient data sets for savings potential relating to individual indications.



- **Patient-related cost bearer invoicing/internal performance settlement** using the patient paths within the health partner network and the patient paths.
- **Identification of personnel and material resource requirements** as well as the requirements for appropriate services in the respective regional health partner network and IT instruments derived from these for bundling and optimisation of patient path processes e.g. through joint planning in a network calendar and as a budget/actual comparison of the structure quality for each health partner network
- **Electronic patient medical record** via the relevant data in the patient path with access for the entire health partner network and the patient/insurant with differential access rights
- **Daily updated comparability of the insurant's status** on the health insurance member card with the data set of the health insurance company



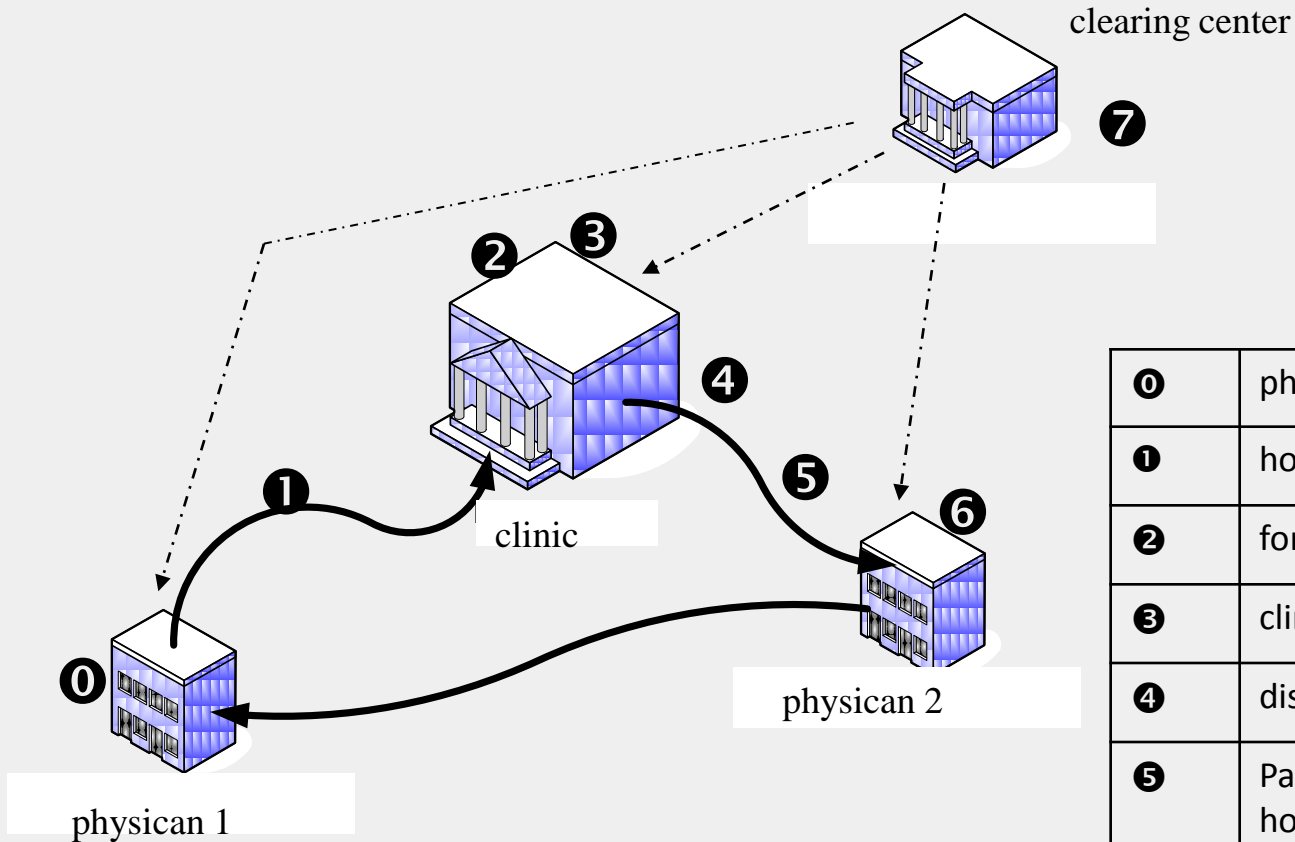
Data generation and data supply

- One of the important objectives of IC is the creation of greater **transparency with respect to the services & performances and the expenses situation**, in order to use this to build the foundation for better steering of the quality and efficiency of the care provided.



DocPortal for case steering in standard health care and IC

Effective reduction of spending in the stationary sector by
specific assignment information within the prescription of
hospital therapy



0	physician
1	hospitalisation
2	for admission
3	clinical treatment
4	discharge
5	Patient discharge from the hospital
6	Physician again
7	(alternative) accounting

Step 1: Active assistance with hospitalisation

CompuGROUP

GTI AG
die Unternehmen der CompuGROUP

Synchronizing the World of Healthcare

Demoversion - [12 / Kindt, Anna / w / 25.08.1979 / BKK VOR ORT]

Patient Formular Extern Abrechnung Privat IGeL Statistik Stammdaten Optionen Ansicht ?

Karteikarte Standard Tagesprofil für M: 0:00

Pat.-Nr. 12 Geburtsdatum (Alter) 25.08.1979 (26)
Name, Vorname, Geschlecht Kindt, Anna (w)
Adresse Gartenstraße 56218 Mülheim-Kärlich
Tel. :
Arbeitsgeber:
Hausarzt:
Kontrolltermine:
Allergien:

Status: Mitglie
Kranken BKK V
Vers.-Nr. 12121
Eingeseh. fehlt (-)
Entfernt:
Zustand:
Dr. me:

Verordnung von Krankenhausbehandlung

BKK CompuGROUP BKK 31425
Name, Vorname der Versicherten Kindt, Anna geb. am 25.08.1979
Gartenstraße 56218 Mülheim-Kärlich
Kassen-Nr. 3723339 Versicherten-Nr. 1212121212 Status 1 0
Vertreter-Nr. 6411111 WK-Einklass. Datum 09.03.2006

☐ Belegarztbehandlung ☐ Notfall
☐ Unfall, Unfallfolgen ☐ Versorgungsleiden (BVG)
☐ Arbeitsunfall

Nächsterreichbare, geeignete Krankenhäuser:

Diagnose/Befund:
Meniskusschädigung durch alten Riss oder alte Verletzung. G. {M23.2-G}

Untersuchungsergebnisse:
Bisherige Maßnahmen (z.B. Medikation):

Fragestellung/Hinweise (z.B. Allergie):
Mitgegebene Befunde:

Drucken Spooler Speichern Abbruch

Klinikinformationen der CG BKK:
Bitte helfen Sie mit, Ausgaben zu sparen!
Nachfolgend eine Liste von Kliniken nach Höhe des Basisfallwertes aufsteigend:
Kath. Klinikum Brüderhaus, Koblenz
Übernehmen Information

02.02.2003

JA 01.06.2002 anam Pat. klag
JA dia Übelkeit
JA lkn 1-5
JA 03.06.2002 dia Sonstige
JA fub Gynäkolo
JA fau 5 Tage, O
JA lko 391U(text
JA 02.02.2003 info Starke W
JA fkh ins Katho
JA lko 1-5
JA 09.03.2006 dia Meniskusschädigung durch alten Riss oder alte Verletzung
JA 09.03.2006

F2 ICD Zusätze | F3 ICD | SHIFT+F3 KL-Liste Dia | STRG+F3 alte Dia | F4 Textbausteine | Shift+F4 ICD-Thes. | F5 DD-Liste | Shift+F5 neue DD | STRG+F5 neue KL-Liste Dia

Start Po... CG... 2 M. 3 W. 2 M. De... Ad... DE 4/05 09.03.2006 16:03

**Conclusion:
Coordinated
hospitalisation procedure.**

Detailed information for the doctor and the patient about clinic-partners of the insurance-company

Conclusion: Prior diagnostic findings are available in the hospital.