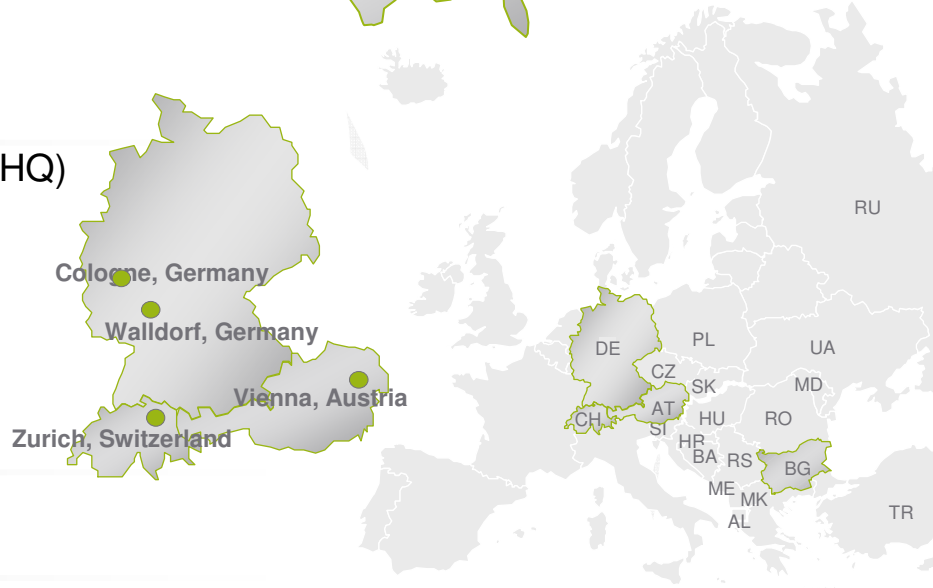
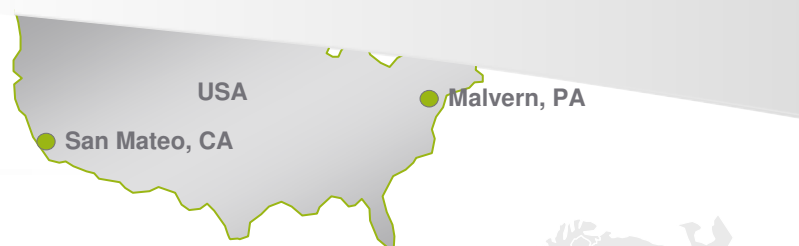




PHR - Electronic Patient Health Memory. Implementation in Bulgaria

Dr. med Thomas Waller, ICW AG, Germany

Sofia, 12.02.2009



Established

- 1998
- 2000: Conversion into a corporation (unlisted)

Locations

- Walldorf, Germany (corporate HQ)
- Cologne, Germany
- Vienna (Austria)
- Zurich (Switzerland)
- San Mateo , Wayne (USA)
- Sofia (Bulgaria)

Employees

- > 600

Investors

- Dietmar Hopp (co-founder of SAP AG)
- Dr. Andreas and Dr. Thomas Strüngmann (Santo Holding [Deutschland] GmbH)
- EnBW Energie Baden-Württemberg AG
- ICW Executive Board, Supervisory Board of Directors, and employees

Executive Board

- Peter Reuschel (CEO)
- Norbert Olsacher

Agenda

1. PHR-Where do we go?
2. Electronic Patient Health Memory. Implementation in Bulgaria
3. GP-Integration as key for success: Experiences in Germany

New Perspectives



The **"health care citizen"** actively creates his/her medical network



Health care citizens are **in control of their data**



Establishment of a new health care culture

- For the first time, the citizen is at the center
- Integration of all participants
- Transparency

Transforming Health Care Quality

Patient-Centered Computing and eHealth

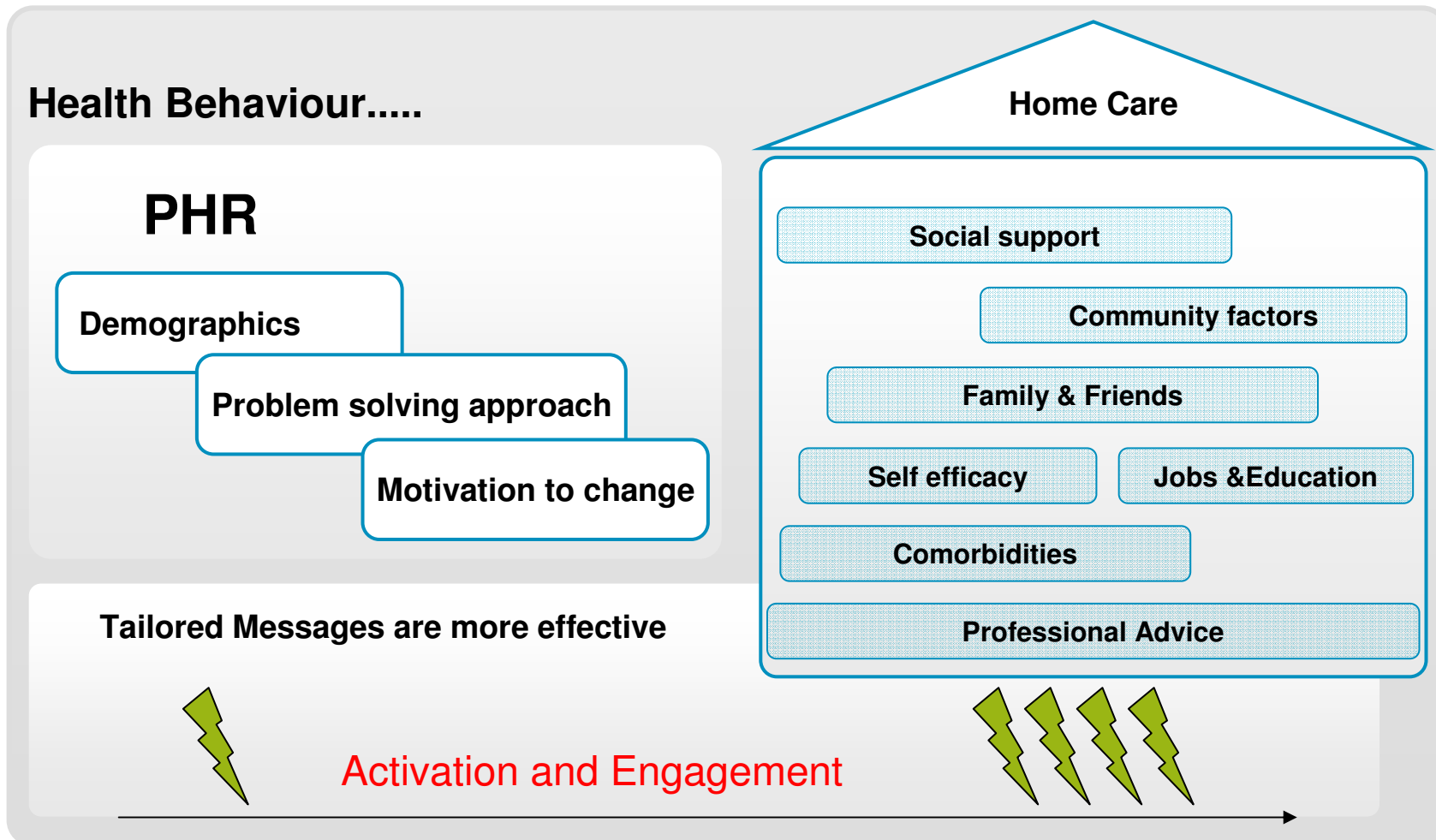
Connected Health Care is Patient centric

- Care when + where it's needed
- Patient has access to data
- Improves adherence + engagement

Role of PHR

Transforming Health Care Quality

Personalizing and Tailoring Clinical Care





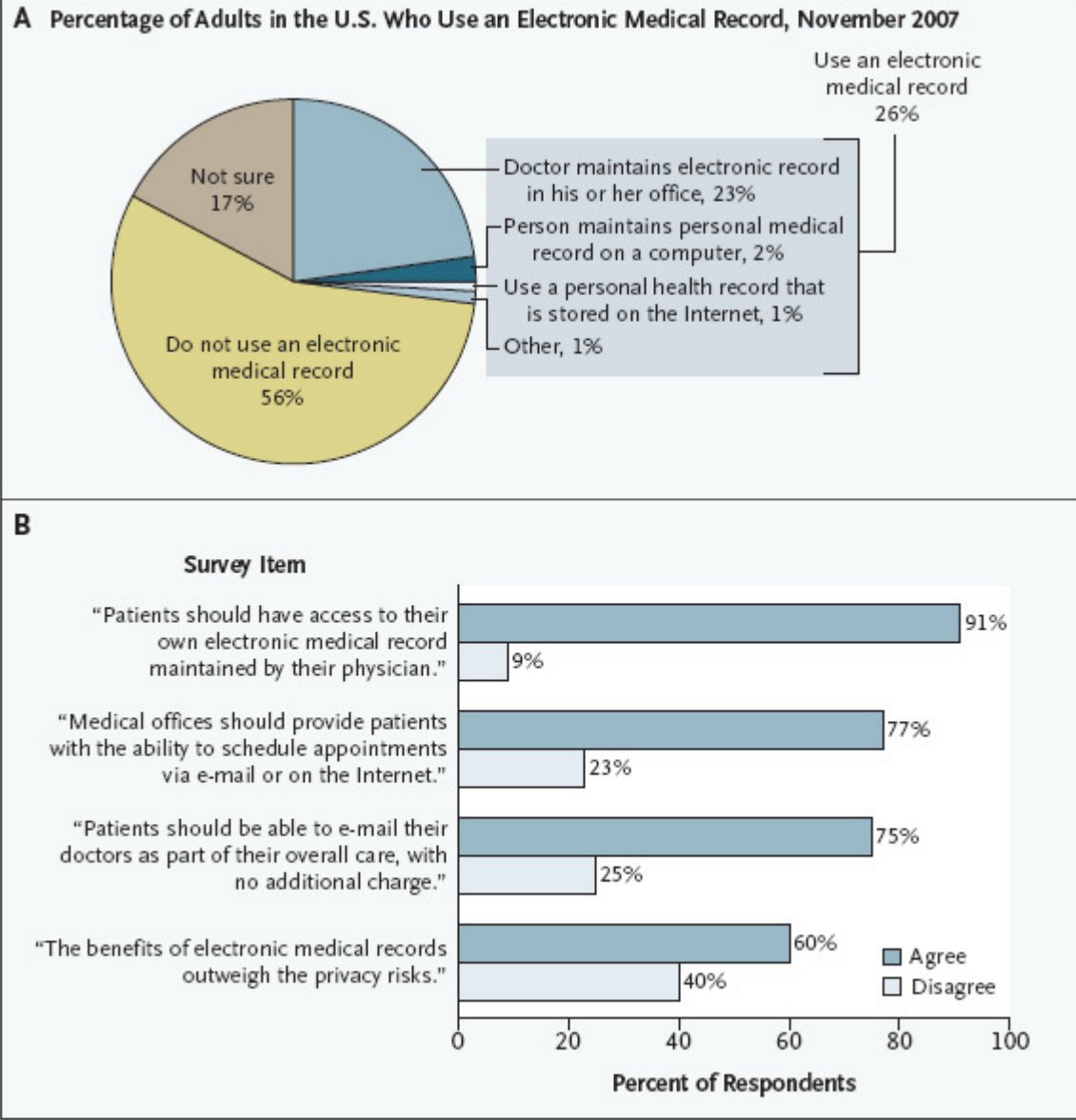
The NEW ENGLAND JOURNAL *of* MEDICINE

Perspective

APRIL 17, 2008

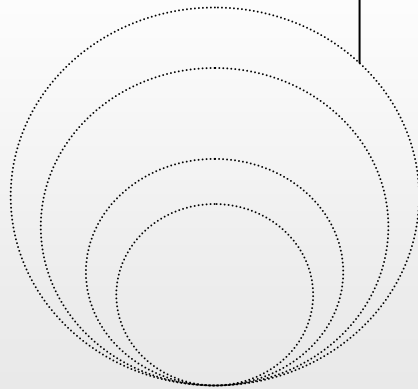
Personally Controlled Online Health Data — The Next Big Thing in Medical Care?

Robert Steinbrook, M.D.



Use of Electronic Medical Records in the United States, November 2007.

Learnings from Google

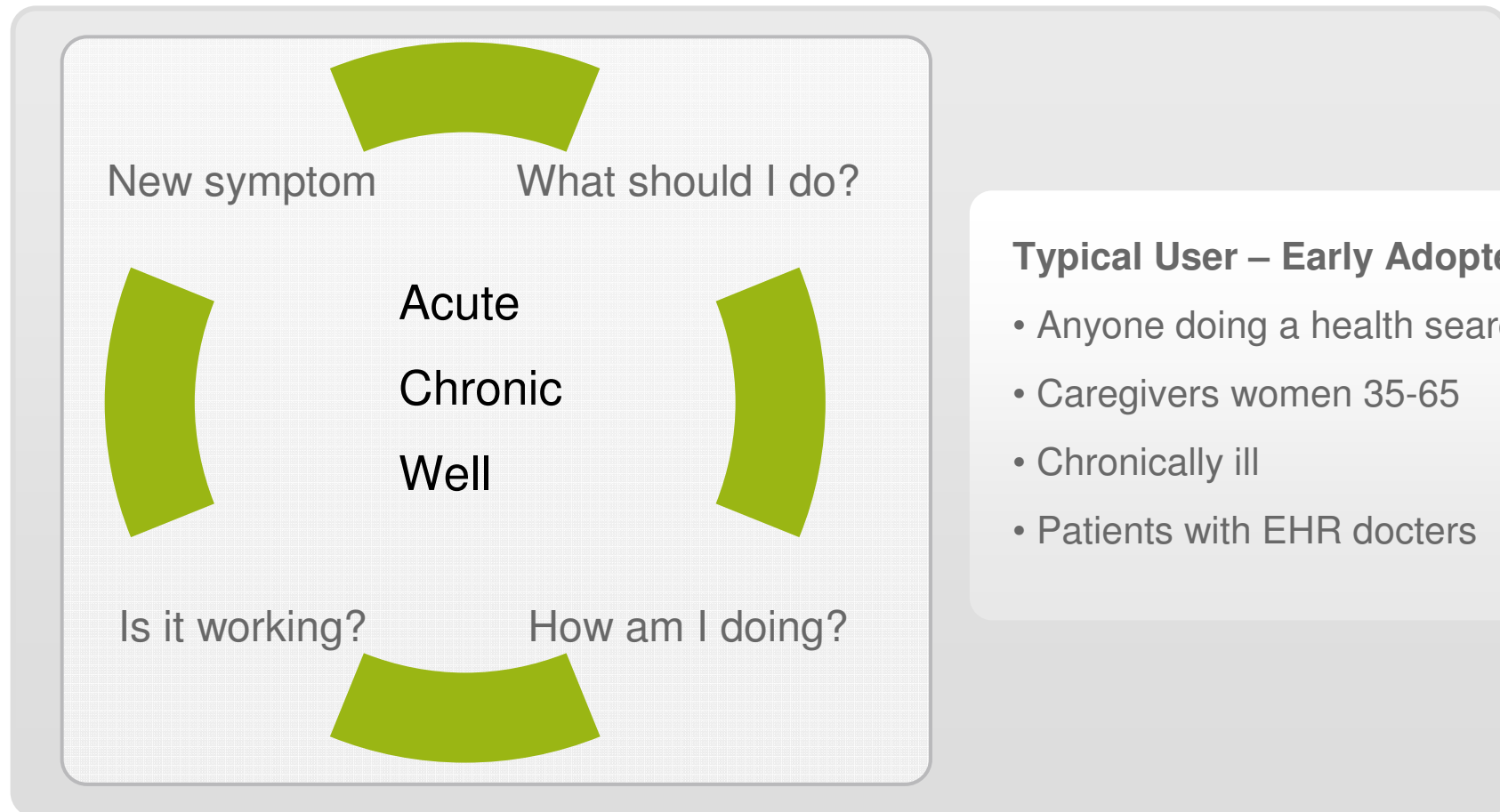


220 Mio adults
139 Mio online
116 Mio online for health
71 Mio online for Rx Info



„I already diagnosed myself on the Internet
I´m just here for a second opinion“

Google: Patient LifeCycle



Sam

- [Notices](#)
- [Drug interactions](#)
- [Profile details](#)
- [Age, sex, height...](#)
- [Conditions](#)
- [Medications](#)
- [Allergies](#)
- [Procedures](#)
- [Test results](#)
- [Immunizations](#)
- [Add to this profile](#)
- [Import medical records](#)
- [Online health tools](#)
- [Medical contacts](#)
- [Find a doctor](#)
- [Create a new profile](#)

- [Add to this Google Health profile](#)
Learn about your health issues and find help
- [Import medical records](#)
Copy and get automatic updates of your records
- [Discover more health tools](#)
Find online tools for managing your health
- [Find a doctor](#)
Search by name, location, and specialty

Profile updates

This profile is now linked with:
Cleveland Clinic MyConsult



- [Request an appointment](#)
- [Log in to your Cleveland Clinic MyConsult](#)
- [Find a Cleveland Clinic Physician](#)

Profile summary

- [Conditions](#)
- Type 2 Diabetes [Reference](#)
- High blood pressure [Reference](#)
- Hyperthyroidism [Reference](#)
- Low Back Pain
- Migraine headaches [Reference](#)
- [Medications](#)
- Amoxicillin
- Lisinopril
- Glyburide
- Metformin
- Ibuprofen
- [Allergies](#)
- Penicillins - Severe
- [Procedures](#)
- Appendectomy

Wants

Reminders

Test results

Email

Appointments

Access EMR

.....

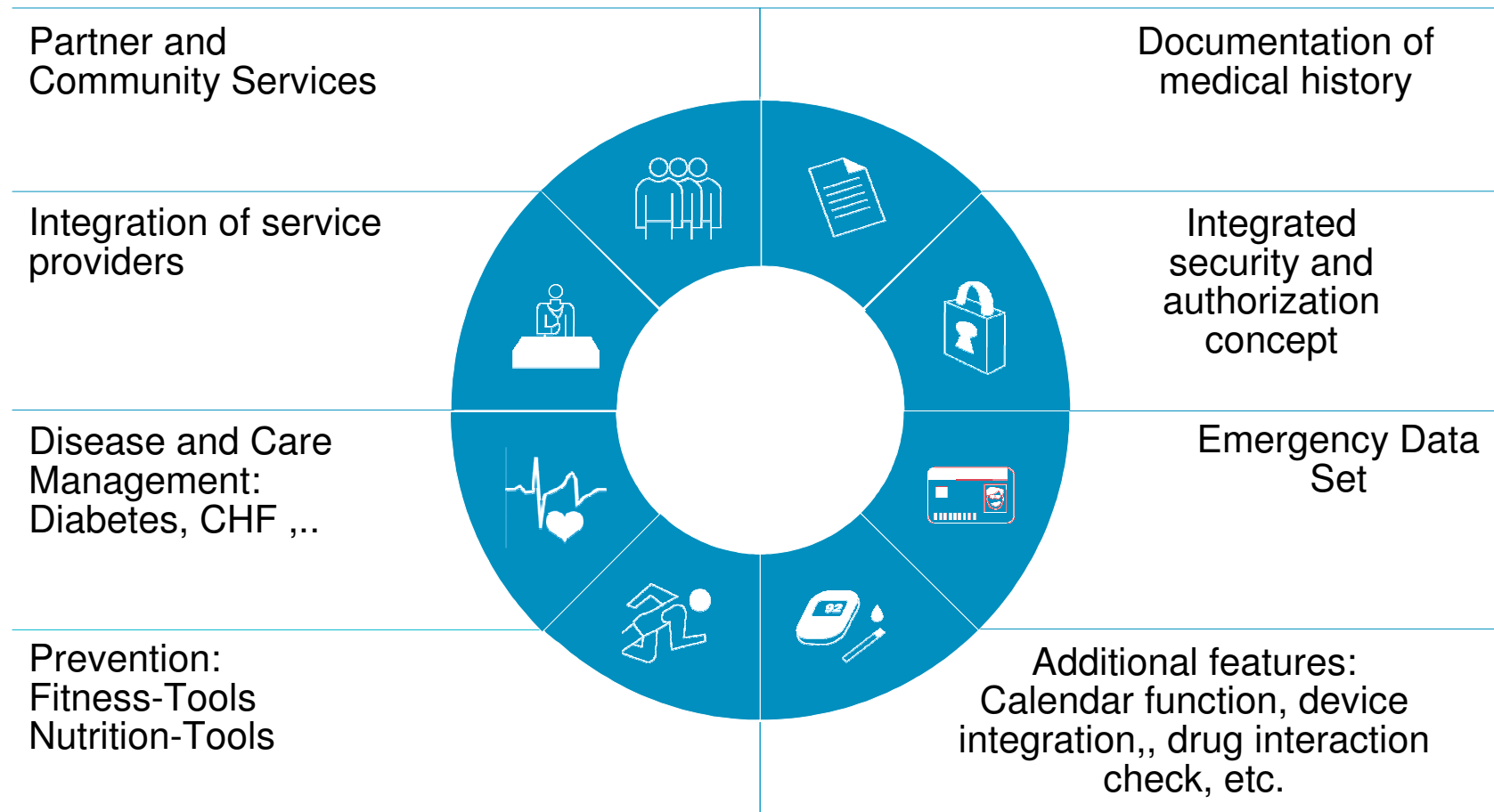
Love



PHR Requirements

- Internationally available, web-based personal health record
- Is owned and controlled by the patient
- Archives all health-relevant information
- Links the patient to his/her physicians and other health care service providers
- Enables increased treatment quality and opens up new options in preventive care
- Fulfills the highest level of data protection and data security requirements according to the laws

Modular Structure of a Personal Health Record

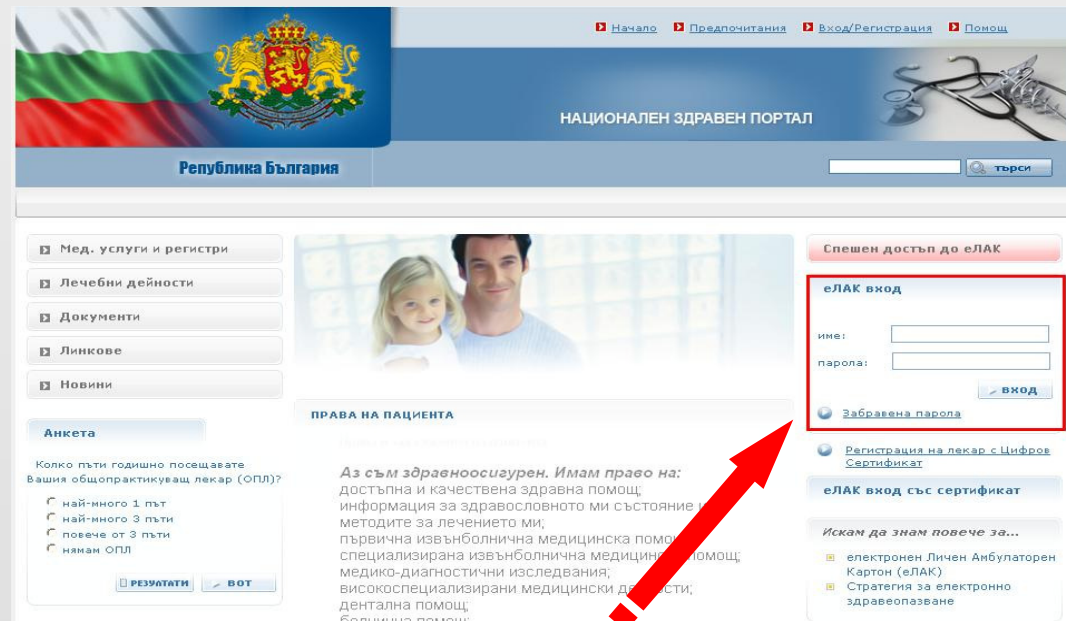


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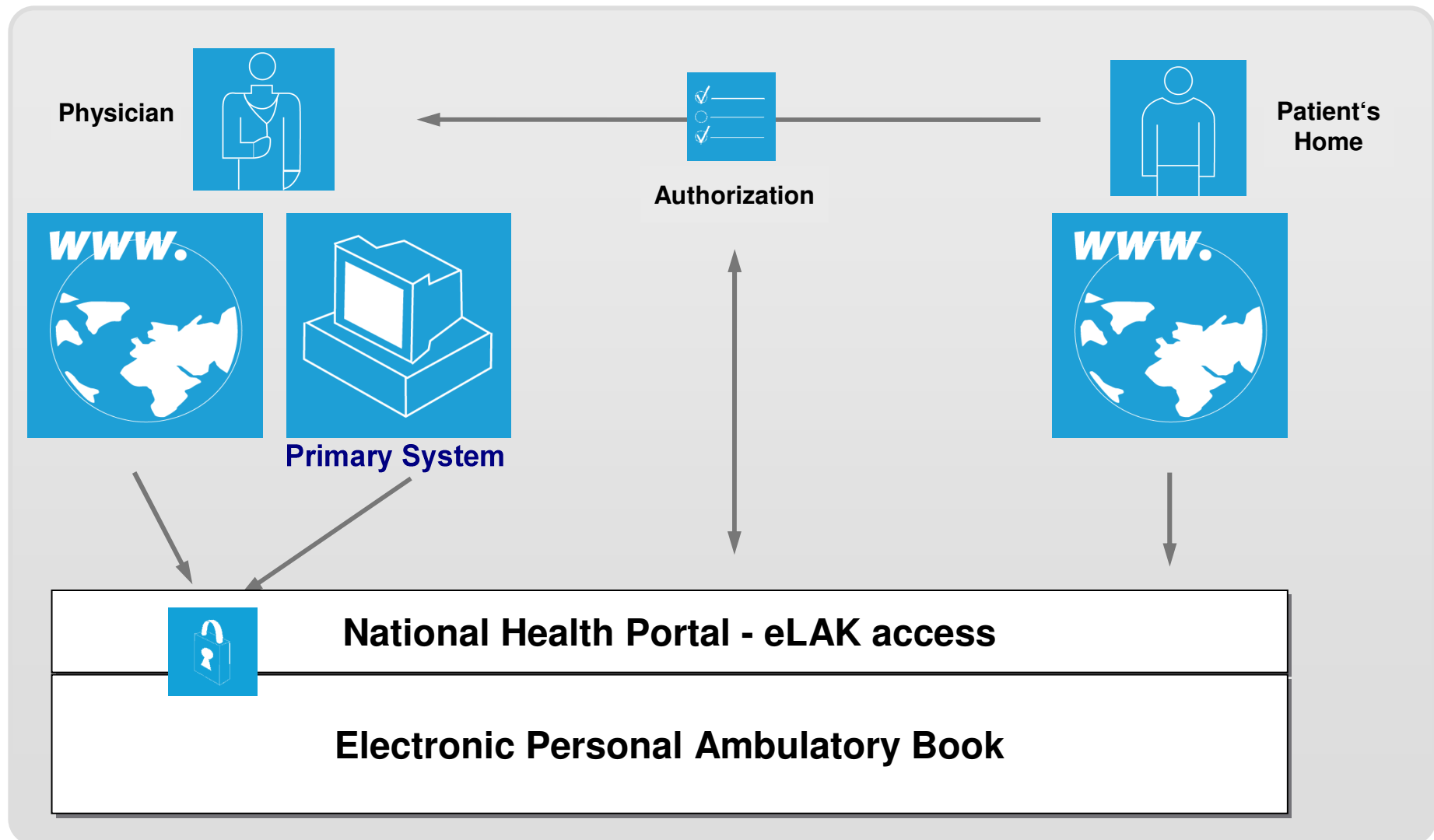
First PHR in Bulgaria – electronic Personal Ambulatory Book (eЛАК)

After a public tender, in **December 2007** the Bulgarian Ministry of Health and the Ministry of State Administration and Administrative Reform assigned to **ICW** as main partner in the *Information Technology in Healthcare Consortium* the development of national health portal and **the first PHR in Bulgaria.**



ENTRY POINT to eЛАК
National Health Portal
www.zdravenportal.bg

Workflow Diagram: electronic Personal Ambulatory Book



еЛАК: Modern e-Version of the Paper Ambulatory Book

ЕГН	Кръвна група	M	Ж	Rh	Име	№	Участък
Внимание! Непоносимост към:					ЛИЧНА АМБУЛАТОРНА КАРТА	Дата на издаване	Диспансеризац. здр.
					Здр. заведение	Адрес:	
					Местоживане		Тел. №
					Месторабота		
					година		
					Дисп. група		
					Води се на учет в друго здравно заведение		
					Име		
					от до		
					от до		
					от до		

Electronic Personal Ambulatory Book (еЛАК) for 40 000 state officials and access for their GPs.

ЕЛЕКТРОНЕН ЛИЧЕН АМБУЛАТОРЕН КАРТОН
валиден от януари 2009 г.

Електронен Личен Амбулаторен Картон

Потребител: Г-н Петър Георгиев | Изход

Български

Г-н Петър Георгиев

ЗДРАВЕН ЛИЧЕН АМБУЛАТОРЕН КАРТОН

Вашите новини

Тук ще намерите новите записи създадени от лекуващия Ви лекар или допълнения към Вашия амбулаторен картон.

ЕКГ (Електрокардиограма)
Ален Палев | 15.08.2008 12:01 EET
Размер: 394 KB
Последна промяна от: Г-н Петър Георгиев | 15.08.2008 12:03 EET

05.08.2008 11:22 EET

05.08.2008 11:20 EET

Библиотека
Сезонни новини

Алергии

Алергиите са вещества чужди за организма, към които организмът проявява особена имунна реакция, независимо от количеството на алергена. Силни алергии са полвинилпирролидонът прахове. Но има и много домашни алергени - екскременти на домашни жакари, прахове за чистене и миене, спори на плесени, прах. Ред храна и лекарства също са алергизиратори. Въобще сега се наброяват около 5000 алергии, с които съвременният човек се среща. И е много трудно, дори невъзможно във всеки конкретен случай да се определи кой алерген е причинителят на реакцията.

01.09.2008

Какво е електронен личен амбулаторен картон?

Преглед на събитията
Организирайте своите прегледи, имунизации и др. събития

Петър Георгиев | Вторник, 19. Август 2008
Годишен профилактичен преглед | Петър Георгиев

One fully integrated **GP practice** – for **direct data entry** from the GP software to the patient's **еЛАК**

Benefits for the Citizen

- Patient as owner of his health data
- Quick overview about the health status
- Available regardless of time and place
- Access to Emergency Data
- Reminders for prevention, vaccinations, examinations, tests
- Avoiding double tests
- Remote monitoring of vital parameters
- Secure storage for important medical documents

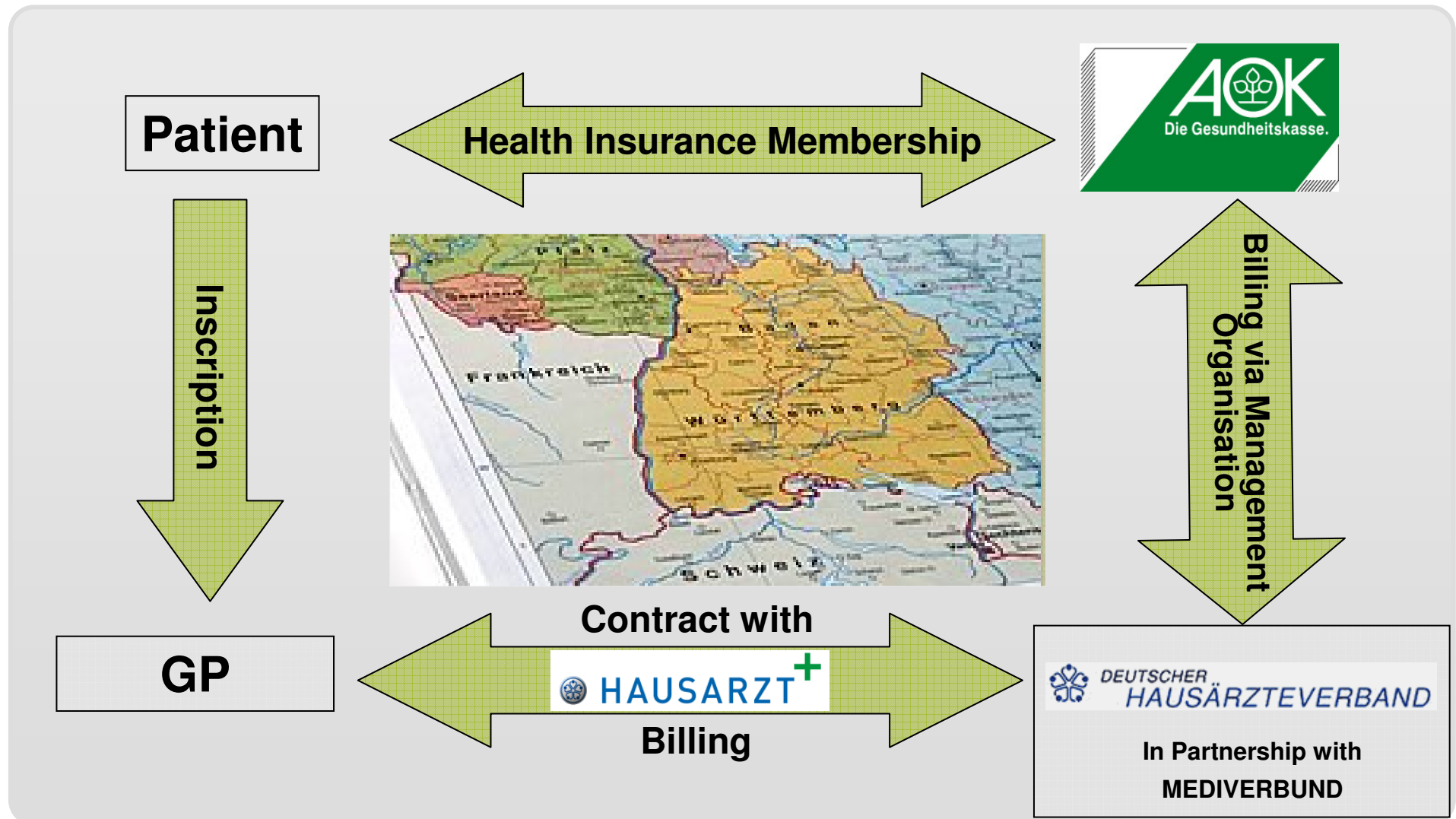
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Background

- New german law forces health insurances to close direct GP-centered contracts until Mid of 2009
- More than 200 contracts need to be closed/adopted
- Critical contract modules cannot be implemented without specific software
- Usage of specific contract software is prerequisite for participation in HZV contract
- With Hausarzt+, ICW ensures contract execution according to plan
- Contract partners on the medical side continue to actively support (rapid) software development by other suppliers to maintain competition and offer physicians individual solutions

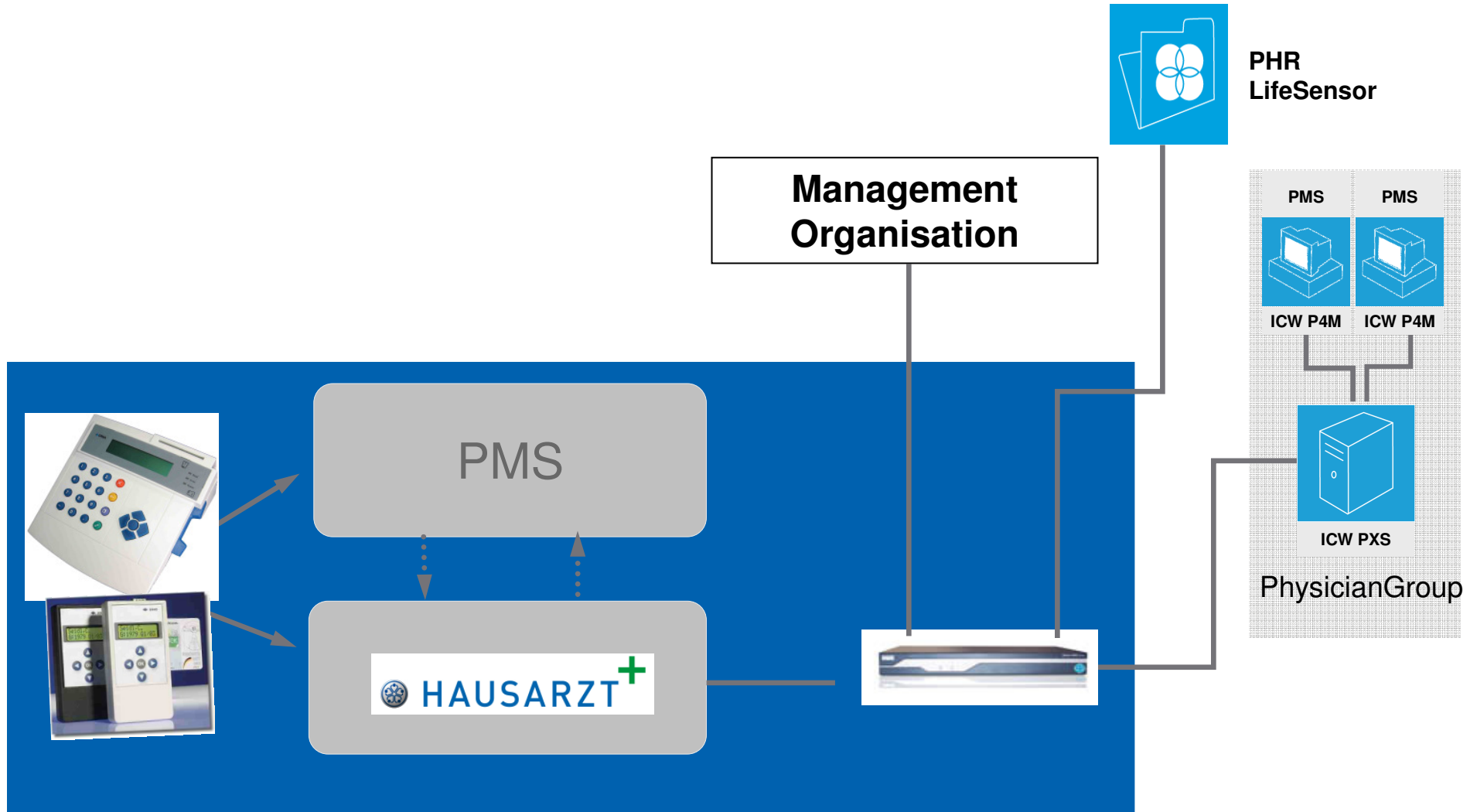
GP Centered Care Model: AOK BW Contract Principles §73b



Hausarzt+

- HA+ is an add-on software package, not a complete practice administration system (PAS)
- HA+ is an approved contract software, and it ensures efficient participation in and billing for the GPcentered contracts (Hausarztzentrierte Versorgungsverträge)
- HA+ incorporates additional HÄVG contracts. These do not need to be purchased separately
- Switch from HA+ to another contract software that does comply with contract requirements is possible at any time. Note the 5-year contract term for HA+ and Connector (IT starter package)
- Preparation for P4P business models

Data Flow



Data Flow to Management Association

- The participating GP has the obligation , to transmit all GP centred contract related data to the management association (HÄVG).
- Within the billing center data are checked, consolidated and finally forwarded to the payer (AOK)
- These data are according to the law (§ 295 Abs. 2 SBG V) and include diagnoses, treatment date, physician identifier, Basic claims data of the insured person, co payment status
- HÄVG is not allowed to forward these data to third parties (Data Security Law).
- No direct transfer of data between physician and payer

Status

- Start Mid 2008: 2500/7000 GP participate
- About 1100 GPs are using Hausarzt +
- About 230.000 Patients already inscribed
- PHR integration as part of an evaluation project
- Financial incentives very important
- Pay for Performance

Conclusion

- Better understanding what a PHR means in a users point of view
- Integration to physicians as a key factor for success, like Kontrax
- Reimbursement models/financial incentives for physicians to use contract software and maintain data in PHR
- GP centered models based on a pay for performance approach as option to create value



Thank you for your attention!

Dr. med. Thomas Waller
InterComponentWare AG

Industriestraße 41

69190 Walldorf, Germany

Tel.: +49 (0) 6227 385 115

Fax: +49 (0) 6227 385 199

E-mail: thomas.waller@icw.de

www.icw-global.com