

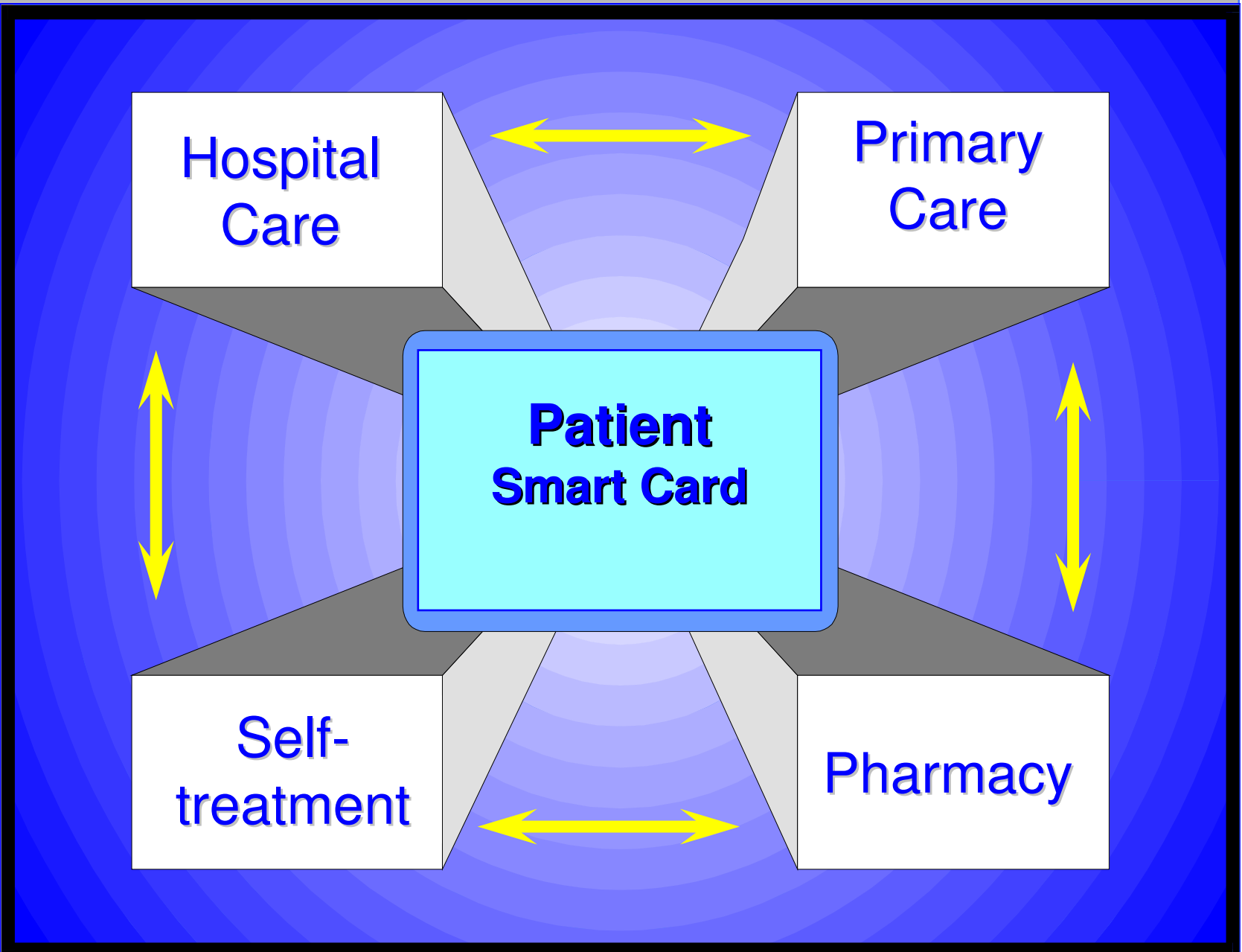
**Cards and beyond
- First steps towards a
European Health Record -**

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Environment and Health,
Munich-Neuherberg / Germany**

Key problems of Medical Information Systems

- access to actual and relevant patient data and clinical knowledge (evidence, guidelines, reference data and cases)
- user-friendly data entry and retrieval systems for clinicians and other health professionals which improve efficiency, reduce risks and return investments
- **Communication between**
 - *Physicians*
 - *Nurses*
 - *Clerks*
 - *Patients and relatives*
 - *Institutions*
 - *Organisations*

Communication model



Purpose of health records

- **Communication by**
 - *Documentation and*
 - *Transporting of Data and information*

for

- ⇒ **The same person**
- ⇒ **Co-treating person**
- ⇒ **Legal purposes**
- ⇒ **Research**

Interoperability levels

- **Technical, enabling the use of different environments**
- **Semantic, a common definition of the data content,**
- **Data presentation, in order to integrate the different applications**
- **Legal**
- **Security, to ensure a trustful environment**

DIABCARD Implementation

Data set includes:

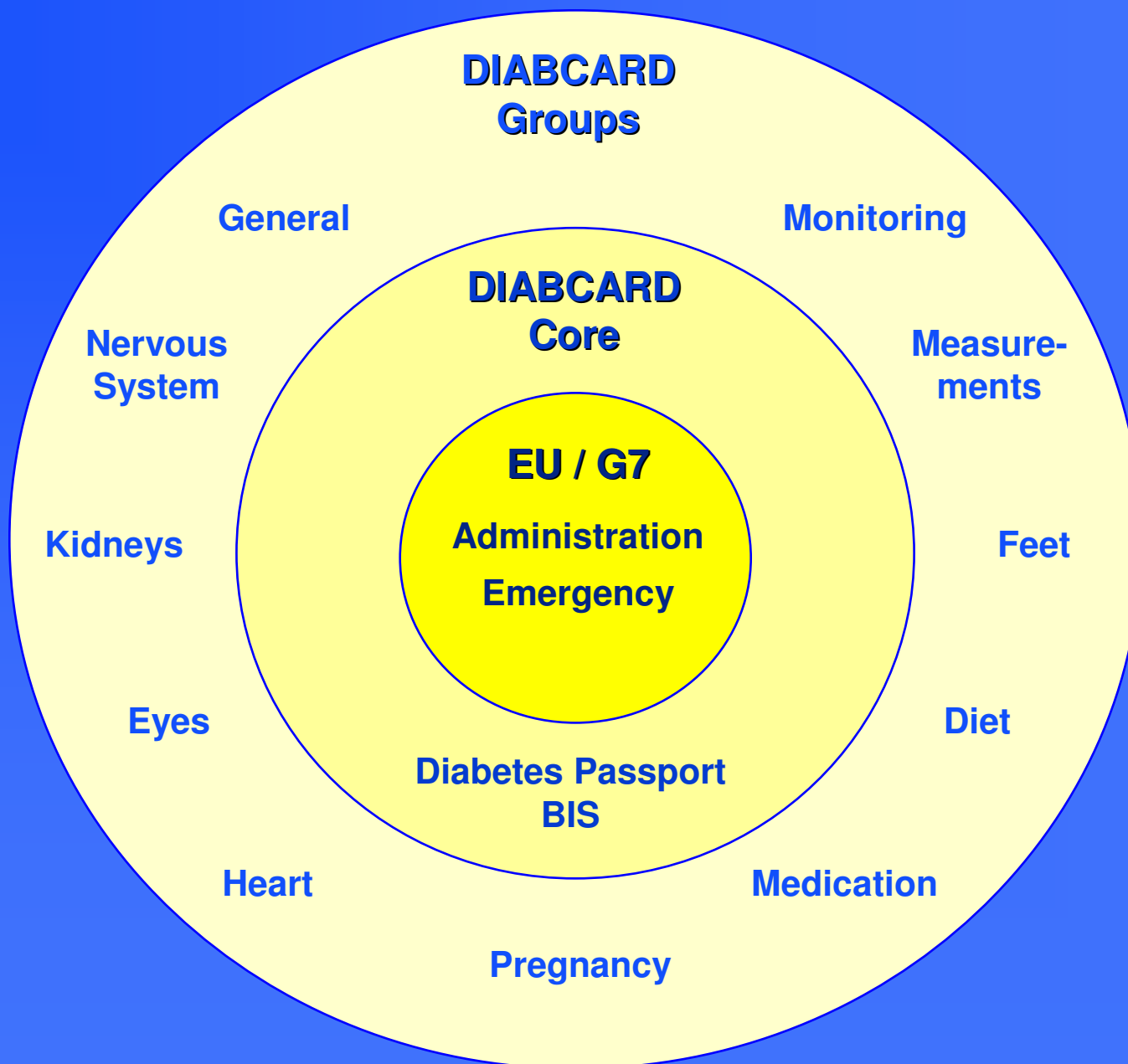
- *Site specific data*
- *European/G7 administrative data set for interoperability between G7 card projects*
- *European/G7 emergency data set for interoperability between G7 card projects*
- *Diabetes passport as a basic monitoring tool for all DIABCARD sites*
- *Basic Information Sheet (BIS) for DiabCare quality improvement*

DiabCare Basic Information Sheet (BIS)

Centre N°	Date :	DIABCARE FRANCE		UNIONS DES MÉDECINS LIBÉRAUX
Données de base	Naissance : 12/19/43 Sexe : M ☐ F ☒			
Consult/Hosp.	Type 1 ☐ Type 2 ☒ Autre ☐ Debut Diabète : 19/80 Debut Comprimés : 19/81 Debut Insuline : 19/97			
Motif : 1 SEUL	Consultation ☐ Surveillance ☐ Déséquilibre ☒ Complication ☐ Urgence ☐ Hospitalisation ☒ Diag. récent ☐ Grossesse ☐ Autre ☐			
Grossesse(s)	achevée(s) dans les 12 derniers mois ☐ Enfant normal ☐ F.C. ☐ Malformation ☐ Mort périnatale ☐			
Facteurs de risques actuels	Diabète connu dans la famille proche ☒ Tabac ☐ Alcool ☐ Cigarettes/j. ☐ gr/sem			
Auto-surveillance	OUI ☒ NON ☐ Si oui Glycémies : 24 /sem. Glycosurie/cétonurie : 5 /sem.			
Education Association	Alimentation ☒ Soins pieds ☒ Complications ☐ Ajustement insuline ☒ Autosurveillance ☒ Hypoglycémies ☒			
Données	Poids : 58 Kg TA Syst/diast : 135 / 80 mmHg Cholestérol : 4 mmol/l			
Dernières valeurs des 12 derniers mois	Taille : 165 cm Glycémie : 8 mmol/l Créatinine : 2 µmol/l HDL : 1,2 mmol/l			
Objectifs de St-Vincent	Cécité ☐ Insuf. rénale ☐ Amputation > cheville ☒ Infarctus ☐ Amputation < cheville ☐ AVC ☐			
Symptômes depuis 12 mois	Hypo TA ortho ☐ Angor ☐ Anérection ☐ Neuropathie péri. ☐ Claudication ☐			
Observations (bilan des 12 derniers mois)	Examen < 12 mois : Oui ☒ Non ☐ Photocoagulation ☐ Vitrectomie ☐ Cataracte ☐ Si oui : Maculopathie ☒ Rétinopathie ☒ Laquelle : non proliférative ☒ préproliférative ☐ proliférative ☐ Acuité visuelle : 10 /10			
Qualité de vie	Hypoglycém (terce pers.) : 4 n/jan Hyper (médecin) : 0 n/jan			
Traitement du diabète	Régime seul ☐ Insuline Nb inj/jour : 3 avant 3 après Stylo : ☐ Biguanides début 19/81 Analogie : ☐ Sulfamides début 19/83 Rapide : ☐ Inib Glucosidase début 19 Mélanges fixes : ☐ Thiazolidinedines début 19 Lente : ☐ Insuline pompe : ☐			
Traitements associés	HTA ☒ Insuf. card. ☐ Card. ischém. ☒ Dyslipidémie ☐ Néphropathie ☐ Neuropathie ☐ Autre ☐			

Sheet german	
Initialen	Geb.Datum : 15
Geschlecht : M ☐ W ☐	
Diabetes Diagnose	Beginn OAD
Beginn Insulin	
☒ Opt. d. Einstellung ☒ Folgeschäden ☒ Notfall	
☒ Schwangerschaft ☒ Sonstige	
Normal	Aborte
Missbildungen	perinatale Todesfälle
Tag	Alkohol : J ☐ N ☐ WENN JA: gr./Wo.
Blutzucker/Woche	Harnzucker/Woche
Diabetischer Fuß	Folgeschäden
Therapieanpassung	Selbstkontrolle
Mitglied einer Selbsthilfeorganisation	
2 Monaten	Cholesterin
Kreatinin	HDL-Chol.
Microalbum.	Triglyceride
Proteinurie	nüchtern
ST.VINCENT Ziele	
Blindheit	WENN JA: in den letzten 12 Mon. Termin. Nierenversagen
created	Created: 09.11.98 17:25 Modified: 09.11.98 17:25

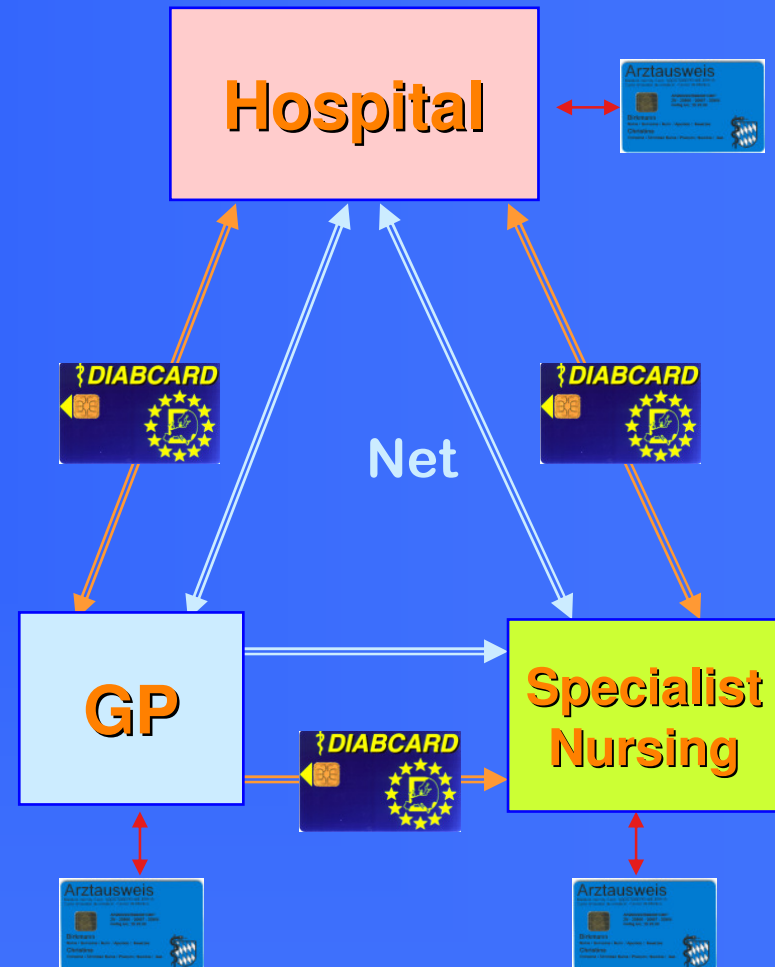
DIABCARD Data Set



ByMedCard HCPP



- **DIABCARD as example for chronic diseases**
- **New Functions**
 - *Secure communication in nets*
 - *Professional Card*
 - *Inclusion of „Strukturvertrag“*
- **Integration into care process**
- **Application of standards**
 - *Health Care Professional Protocol*
 - *EHRcom planned*



Smart Cards

- Will be an integrated access, emergency and communication tool for citizens in the function of
- Health/patient cards with similar functions like professional cards
 - + emergency data
 - + interim storage of clinical data
 - + service oriented data
 - + pointers to multi located EHRs
- Professional cards
- Institutional cards

European Health Insurance Card



EFMI - Special Topic Conference 2003

The content of the Electronic Health Record:
Clinical Datasets for continuity of care and pathology networks

Roma, 6th -7th October 2003

Recommendations – Revised draft

During the Conference, we received 27 forms with the feedback from the participants.

The comments were discussed in an open parallel session with chairs, speakers and volunteers. Then a synthesis was presented in a plenary session. The audience decided to circulate a revised draft (this one) and to discuss it by mail.

The major concern was a better organization of introduction and recommendations – with titles – with a more clear explanation of what we mean by "Clinical Datasets", within a more explicit description of the EHR context (including Natural Language Processing), in particular of the ongoing efforts coping with the theories and the difficult deployment of EHR.

The need for a Roadmap, with practical short term results as well as more long term actions, was stressed (the recommendations were felt too long-term or too abstract). More emphasis on the participation of citizens/patients was suggested.

About the individual statements of Introduction and Recommendations, the vast majority was approving them without comments, whereas several participants requested to clarify them, or provided suggestions to add further details.

A total of 45 suggestions were received, to improve the 8 statements the Introduction (no disagreements). The most troubled statement was the one about the standards on EHR (that now is more detailed, according to the comments).

A total of 47 suggestions were received, to improve the statements in the Recommendations (2 people with disagreements). The most troubled statement was the first one (that now is #6). The result is the present revised draft, nearly doubling the size of the previous draft.

Some concern emerged about the resources to carry on the activities that are envisaged in this document. The immediate goal of this document is actually to activate the proper amount of skills and resources within voluntary organizations to start the process, promote the mature results and demonstrate the feasibility and the benefits of the approach. The long term goal of this document is to raise awareness in the governmental bodies, to bring eventually the process into the proper institutional context.

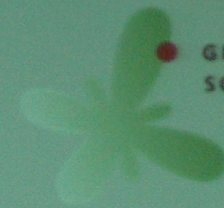
**Send a reply with your reactions to info@prorec.it
Deadline 9th of November, 2003**



Components of Health Information Systems

- Electronic health records which will help manage overall practice and patient documentation
- Electronic prescribing which will effect dramatic changes in drug-selection, prescription-writing, and drug fulfilment processes, but also will enable medication monitoring
- Online communication for legal and clinical purposes
- Remote disease management for new ways of interacting with patients

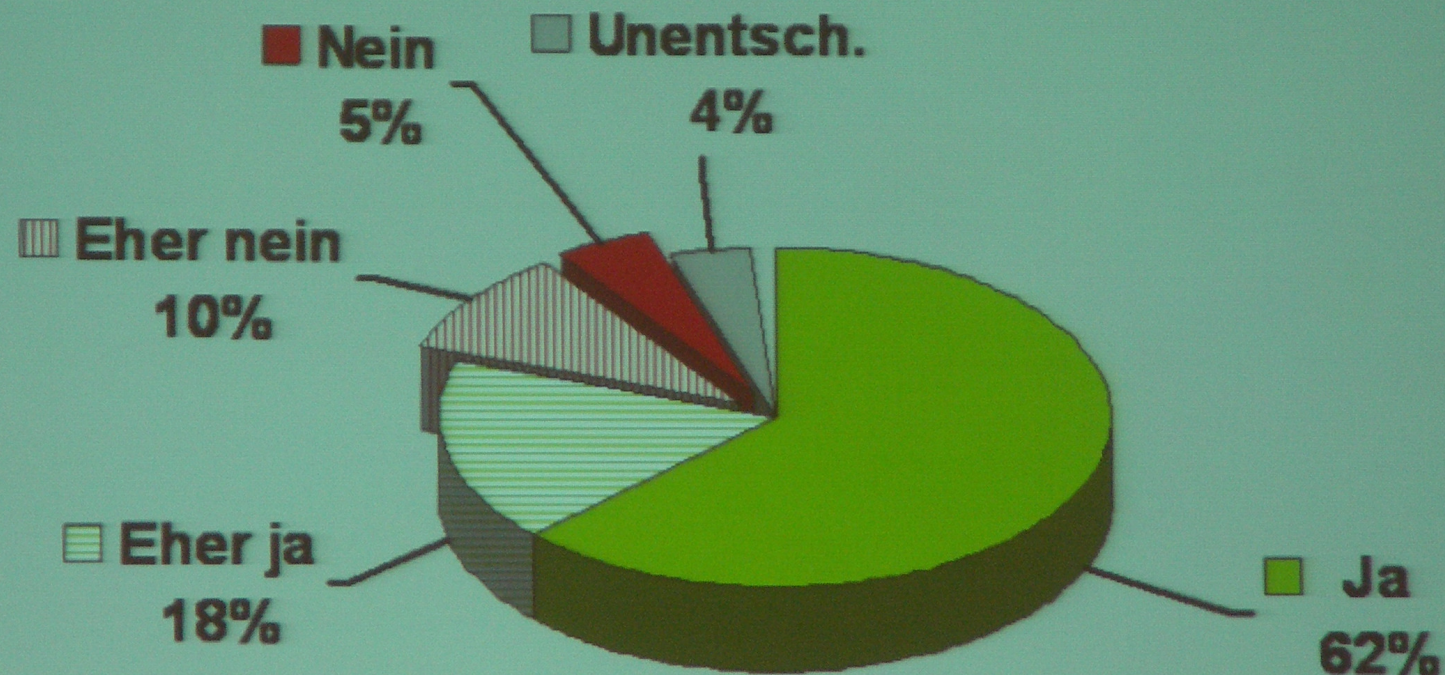
Gesundheitskarte
Schleswig-Holstein



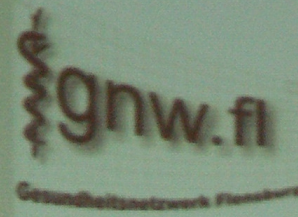
GESUNDHEITSINITIATIVE
SCHLESWIG-HOLSTEIN

Akzeptanz von Gesundheitskarte / elektronischer Patientenakte

Frage 1: „Nutzung der neuen Kartenfunktionen“



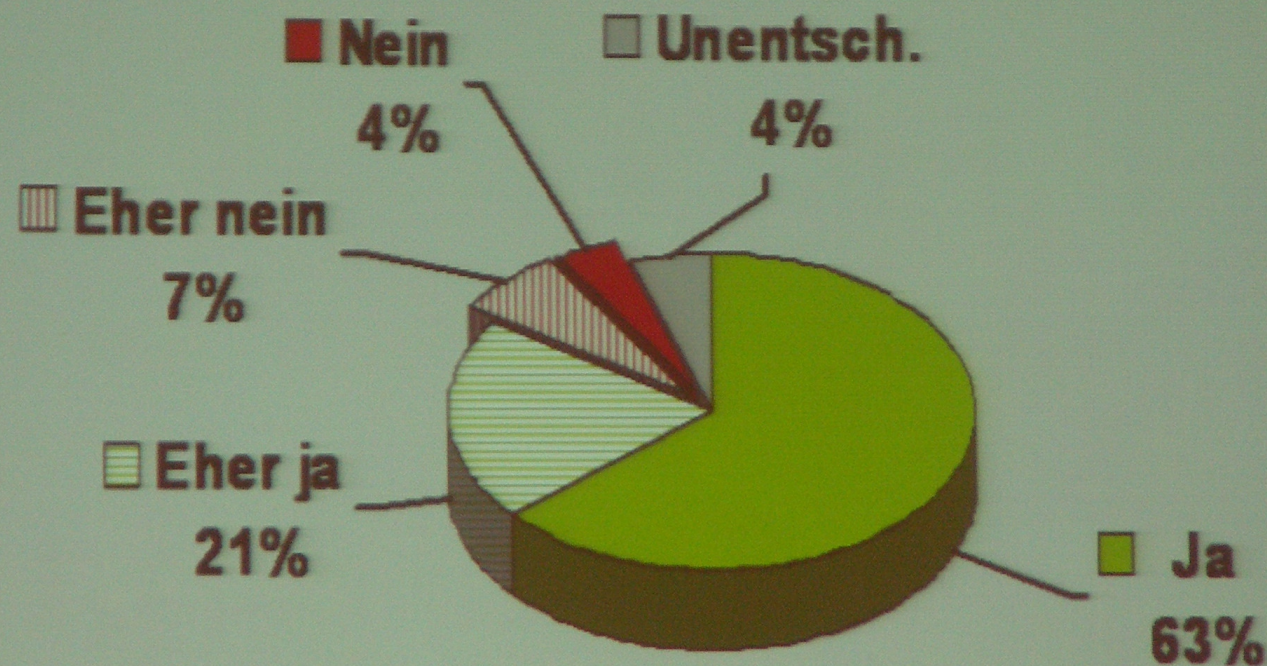
Gesundheitskarte
Schleswig-Holstein



GESUNDHEITSINITIATIVE
SCHLESWIG-HOLSTEIN

Akzeptanz von Gesundheitskarte / elektronischer Patientenakte

Frage 2: „Nutzung der elektronischen Patientenakte“



- Network of national PROREC centres
(Belgium, France, Spain, Italy, Slovenia,
Germany, Denmark, . . .)
- Tasks
 - *Forum for EHRs*
 - *Communicating (national) solutions*
 - *Supporting new standards (EHRcom)*
 - *Education*
 - *Certification and quality labelling*

DIABCARD Health across Borders based on

- PDC-HPC Architecture
- Common data definitions
 - *DiabCare (English, German, French, Italian, Greek)*
 - *Strukturvertrag/DMP Diabetes (German, Hungarian)*
 - *HCPP secure communication*

Conclusions

- **Interoperability in Europe is key**
 - *Internal*
 - *External*

- **Needs work**
- **On institutional level**
- **On national level**
- **On European level**

- **Conferences like eHealth 2005 can play a role**

Thank you!

DIABCARD.com (Demski Hans 27.04.1969)

Archiválás | Urlapok | DIABCARD | Átszerkesztés | Extrák

Törzsadatok Strg+T

Fizikális

Magasság

Anamnesis Strg+A

Laboratórium Strg+L

Intézkedések Strg+K

Zárójelentés Strg+E

Link Strg+I

Láb érzékenysége

Vibrációérzés-vizsgálat

Autonóm neuropathia

Amputáció B

J

Ulcus, gangraena

Láb ellenőrzés

Láb pulzus

Betegoktatás

történt

Nem történt, mert..

Egyéb ok:

Beutalás

Nem történt, mert..

Egyéb ok:

21.04.2005	15.04.2005	14.04.2005	13.04.2005	02.03.2005
	194 /	194 / 79	194 / 80	194 / 79
	/	148 / 97	142 / 94	137 / 96
	nem ismert	történt	történt	nem történt
		nem		nem ismert
		feltűnő		észrevétlen
		normál		kóros
		igen		igen
		Boka felett		Térd felett
		nem		Boka alatt
		meggyógyult		meggyógyult
		nem kivitelezhető		nem kivitelezhető
		nem tapintható		tapintható
				átvezetve
		a beteg nem alkalmas	a beteg nem alkalmas	
		igen, szemorvos	nem	nem
	egyéb		páciens megtagadja	páciens nem képes

Information: engel@gsf.de, <http://mirc.gsf.de/hab>, <http://mirc.gsf.de/wgcards>