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Siemens Healthcare.

e-Health in practice: Experiences and results from regional projects in Europe
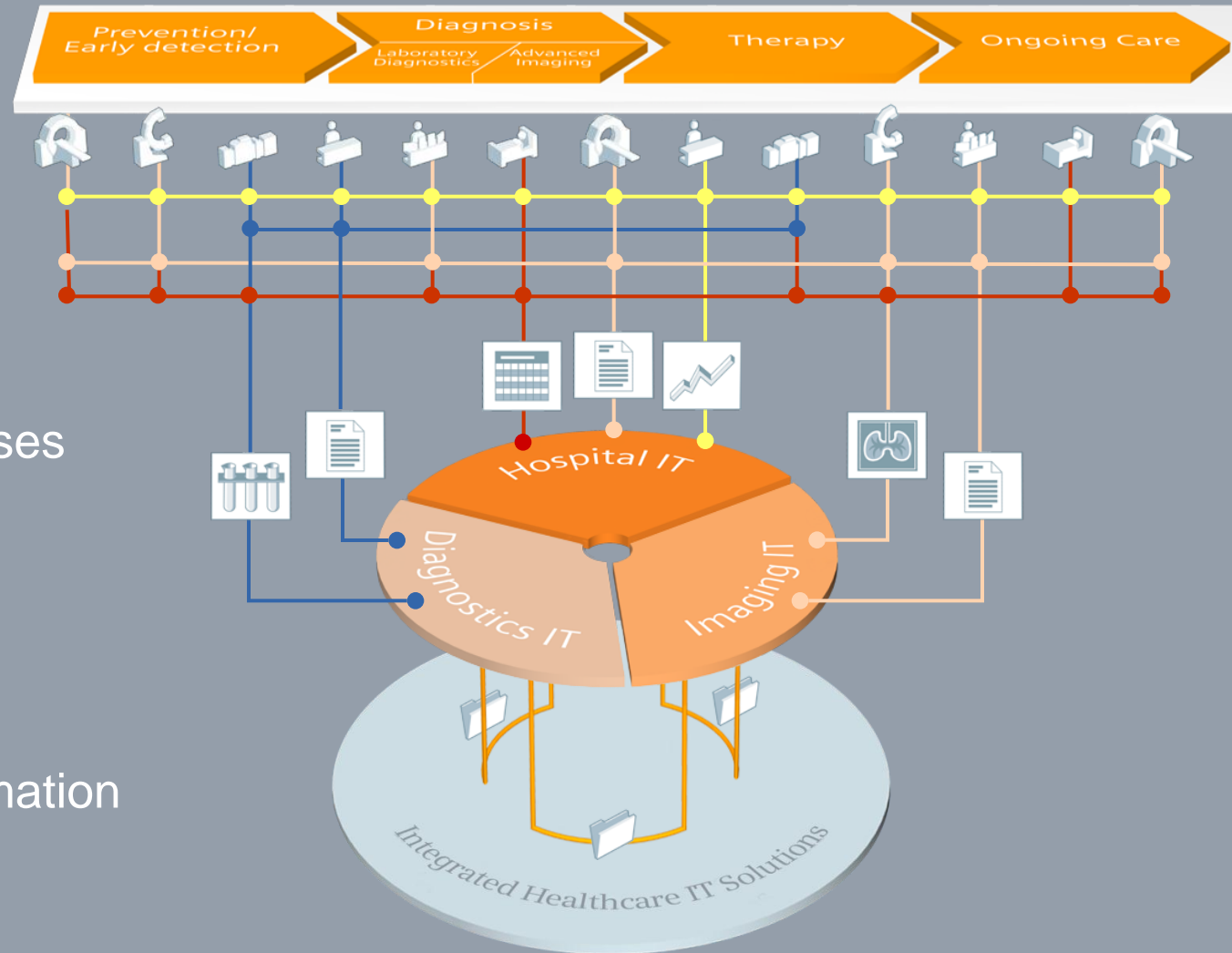
Dr. Stefan Resch, Siemens AG Healthcare

Agenda

- **Vision**

- **eHealth Solution**

- **Projects**

- **Lessons learned**

Vision Becomes Reality:
Optimization within Hospital is Reaching a "Local" Limit

- Continuum of care

- People and processes

- Software Solutions

- Data management

- Integration of information

**Next Step:
Cross Institutional Communication and Collaboration**

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- Care collaboration
- Managed care
- Resources allocation
- Quality management
- Standard of Care
- Health care value chain

=Improved quality of care and lower cost

Specialist
Clinical Conference

Hospital
Electronic Referral

General Practitioner
Discharge Summaries

Communication platform SOARIAN IC

Community Clinic
Shard findings / Teleradiology

Rehab Center
Rehab-Plan

Specialist Hospital
Intersectoral Cooperation
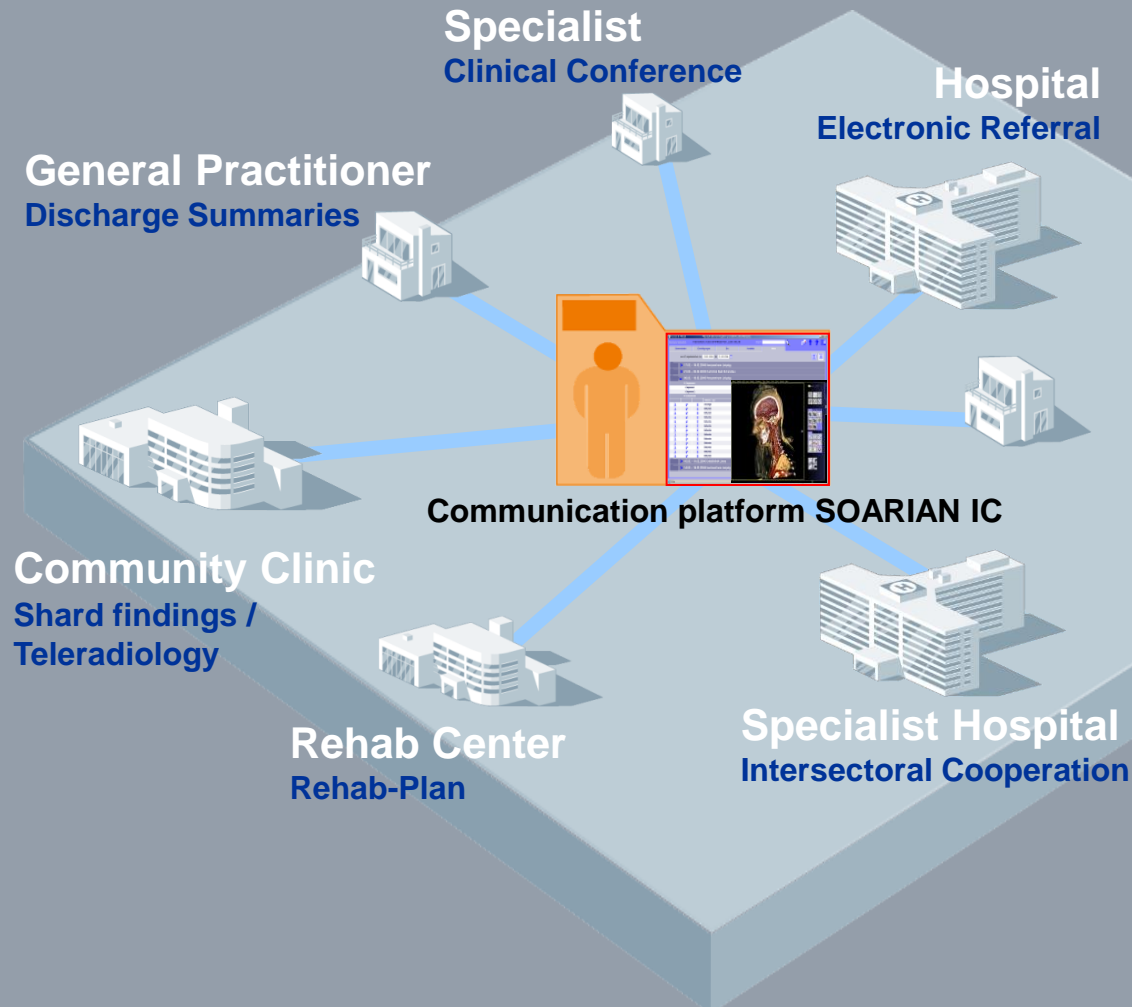
Typical Functionalities Needed for Health Information Exchanges (HIE)

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Electronic Health Record

Task list and Notification

Consent-Management

Audit Trail / Reporting
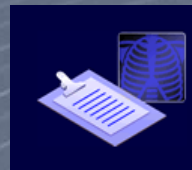
Master Patient Index (MPI)

Electronic Referral

Forms

Teleradiology

Clinical conferences

Communication / Consultation

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Key Figures Rhön-Klinikum AG

- **Private Hospital Chain**
- **Second biggest Private Hospital Chain in Germany**
- **46 Hospitals**
- **2 University Hospitals**
- **38 outpatient Medical Centers**
- **16.000 Beds**
- **2.000.000 Patients**
- **38.000 Employees**
- **€2.55 Billon Turnover**
- **Listed on the German Stock Exchange**

RHÖN-KLINIKUM
AKTIENGESELLSCHAFT

*WebEPA: Web based, electronic Health Record

Goal

- Increase efficiency in cross-sector care and interoperability between care

Realization

- Connect 46 hospitals, outpatient medical centers & practitioners with access to clinical documents (PDF, DICOM, JPG, CDA...)

- WebEPA will integrate 130 information systems >1,000,000 patients will be registered and cleared with integrated MPI per year

Benefits

- Increased quality of care & cost reduction

- Knowledge Networking

- Helps avoid duplicate diagnostic tests

- Availability of medical special knowledge in remote regions

- Fast and reliable patient care

- Accelerates medical processes

RHÖN-KLINIKUM
AKTIENGESELLSCHAFT

*WebEPA: Web based, electronic Health Record

Goal

- Implementation of a national public health initiative (diabetic retinopathy screening program) supported by an IT infrastructure to avoid blindness caused by diabetes

Realization

- Define processes and a quality program that can be applied to geographical areas with different resource levels

- Implement an integrated, IT-supported diabetic retinopathy management program at 73 locations and 5 regional grading centers

- About 230,000 patients and 500 users registered (as of end of June 2008)

Benfit

- Less losses of sight by diabetes

Overview of the diabetic retinopathy screening process in Scotland

1. Maintain Diabetes Register
2. Update Call/Recall Database
3. Invite Patient
4. Attend Patient
5. Image Capture
6. Grading and Reporting
7. Communicate to Patient & Healthcare Professionals
8. Maintain Diabetes Register

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Participants:

- Dept. for children's cardiology
- 15 specialists for children's cardiology in northern Bavaria
- 20 hospitals in northern Bavaria
- Ca. 400 patients/year

Subject:

- Share all relevant patient-related data from UH Erlangen with involved partners
- Provide specialist consultation for GPs
- Share GP's findings with UH Erlangen

Benefits

- Drastic reduction for re-admissions
- Drastic reduction in support calls from GPs
- Better quality of treatment because of more information

UH Erlangen

Specialist

Full documenation
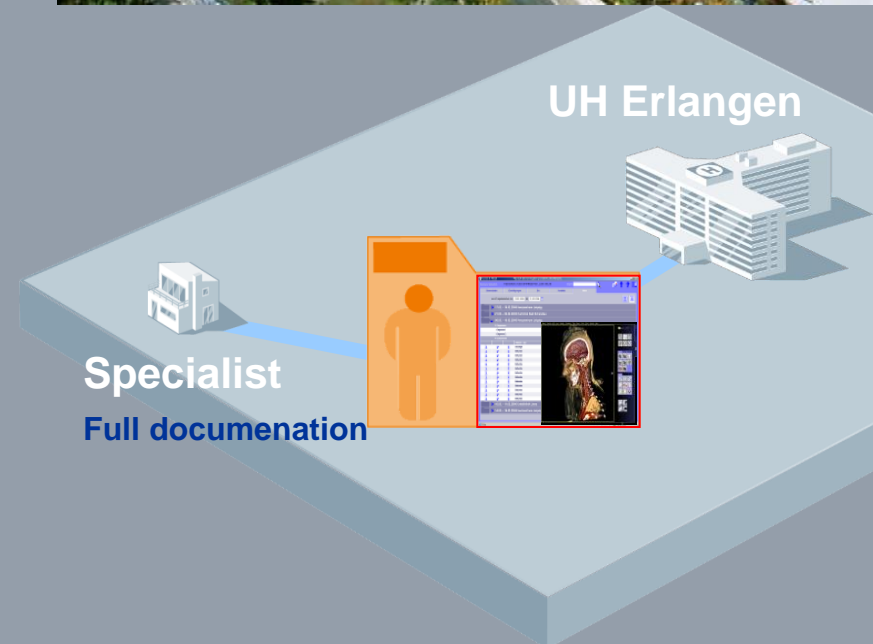
Lessons Learned: eHealth Is Happening Today !

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- **There Is No Generic eHealth Solution**
  - Benefits Are Created within the Individual Care Processes
  - Ideally, these Care Processes Are Defined Already
- **eHealth Solutions Can Actively Support Clinical Processes Through:**
  - Second opinion
  - Clincial conferences
  - Managed Care
  - Regional collaboration
- **Change Management Is Crucial for the Success of eHealth Projects**
- **eHealth Will only be Successful If Tightly Integrated into Existing IT Infrastructure**

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Thank you for your attention!

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Lessons learned

When is eHealth most beneficial?

- There are already common processes
    - Second opinion
    - Clincial conferences
    - Managed Care
    - Regional collaboration
- Relevant information are digital available
- Incentive to use a eHealth solution

What are the most important challenges?

- Adaptation of the existing processes to the IT
- Change organization when necessary
- Convincing medical staff of the advantages of new eHealth functionalities
- Of course interfaces!