SEHR
System for Electronic Healthdata Recording

Process of Care based Information Management in Healthcare

Goals & Concept
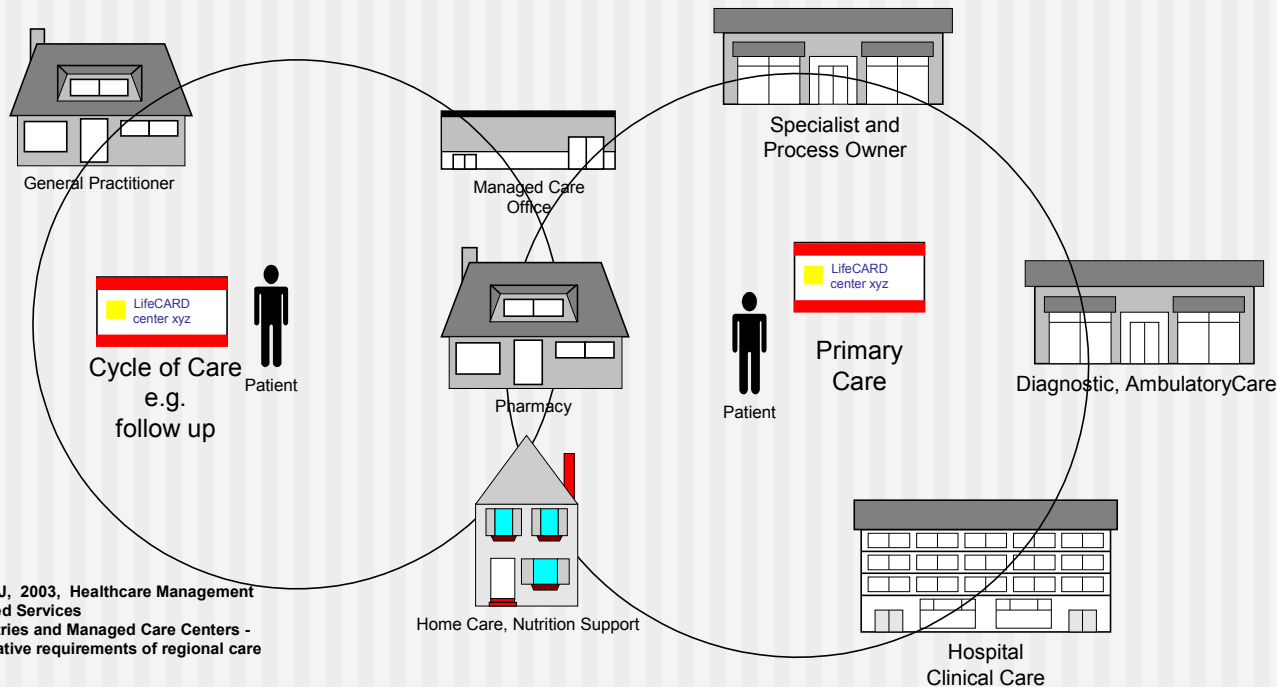*(in brief)*

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Sharing the patient and his related informations like diagnostic results, case reports...
Goal#1 – Focusing on regional community in reality

General Practitioner

Managed Care Office

Specialist and Process Owner

LifeCARD center xyz

Cycle of Care e.g. follow up

Patient

Pharmacy

LifeCARD center xyz

Primary Care

Patient

Diagnostic, AmbulatoryCare

Ref.: Haase, HJ, 2003, Healthcare Management
Univ. of Applied Services
Clinical Registries and Managed Care Centers -
The administrative requirements of regional care

Home Care, Nutrition Support

Hospital Clinical Care

Each regional community of facilities working together in healthcare and sharing patients should be able to present medical informations to all case-serving members

Sharing Informations about a Patient...

Goal#2:
Share informations just-in-time, standardized but simple and secure

With SEHR health professionals will be able to share the patient files within a secure, non-public intranet based on the common IP technology
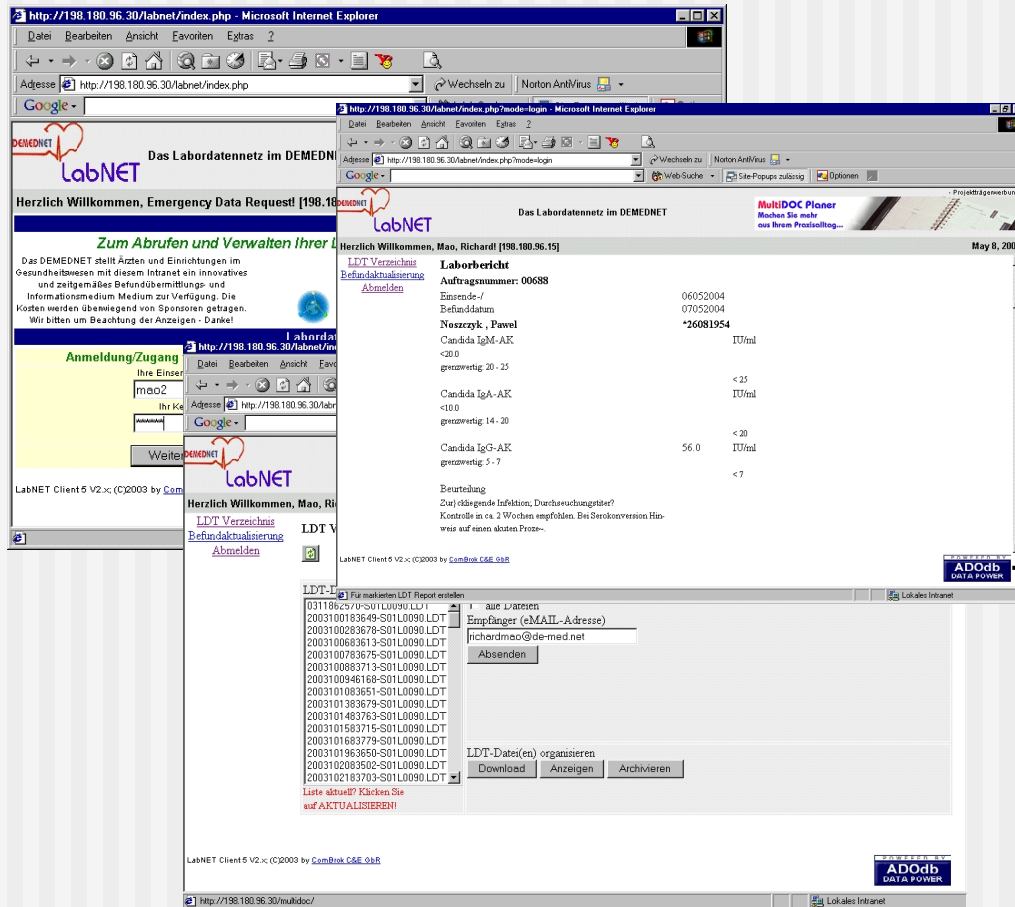
The sharing of informations is strictly case orientated

There are a lot of proprietary systems so the SEHR is encapsulating them to pass over documents simply as proprietary records but also it is possible to transfer standardized records like HL7 and GEHR (an EU inititative)

Improving and Saving Quality of Care

Goal#3:

Enable order tracking and recurrent control systems for long-term treatment, e.g. diabetic care, follow-up in cancer care
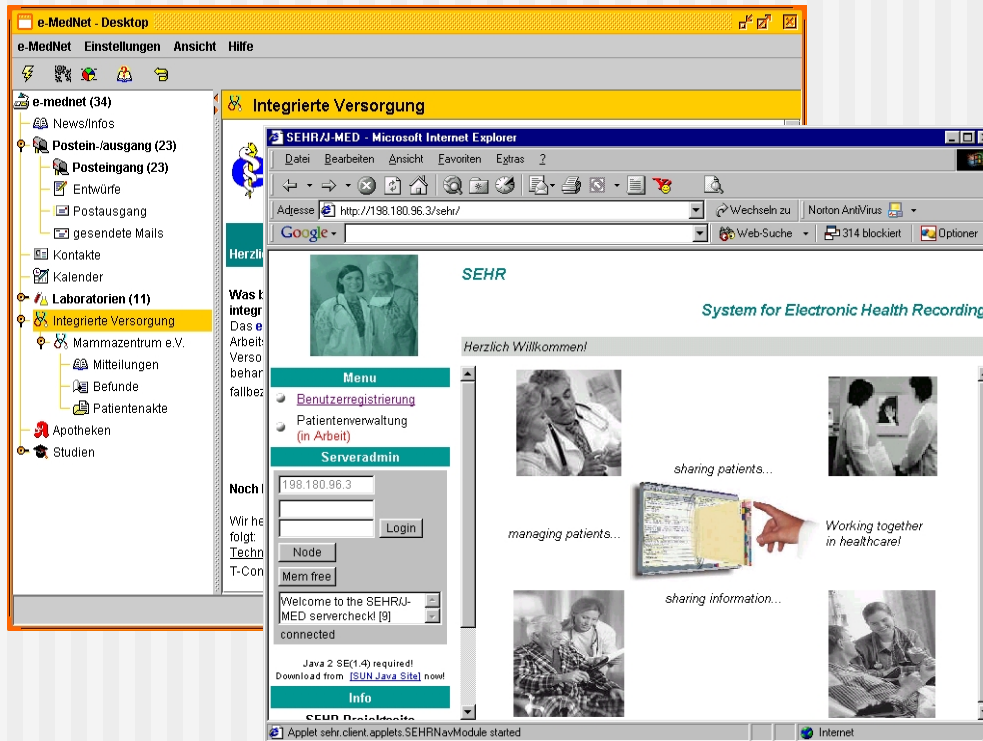
There are a lot of diagnostic related information pools in a region where professionals are working together e.g. laboratory services.

To reduce unnecessary time gaps of inactivity or to manage long-term periods of dognostic control the SEHR concept is based on a process orientated managed care with tracking functionality

Independent, non-proprietary

Goal#4:
SEHR should be a multiplatform, OpenSource solution

Examples of a running SEHR system:

Access by a **Java based thin client** for a network to share patients with breast cancer (A project in Hamburg, Germany) and by **WEB access as using Java Servlet Technology**

The shown client in the background was exclusively developed for the project „Breastcancer-Network Hamburg" [http://www.brustkrebsnetz.net] which uses the SEHR for some regional communities.

But…
How can the patient be managed by using SEHR?
What kind of informations are from interest in sharing the patient? How to collect data?

With SEHR managed care becomes a virtual assistent for carrying out the efforts of an economic and efficient healthcare…

Basic Steps of Implementation:

1. Analysing and definition of regional capabilities to share resources

2. Planning/Analysing of typical / commonly required pathways based on standards of disease management

3. Definition interdisziplinary workflows for the case management

4. Start using SEHR by connecting interfaces like HL7, PDF-documents and defining handling procedures (work-flows)

The result of a SEHR implementation will be an economical and quality driven infrastructure for managed care communities...
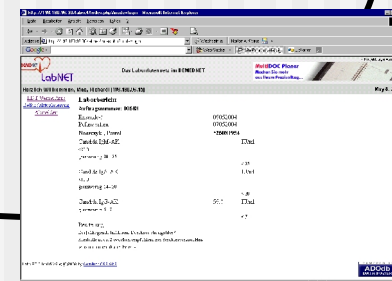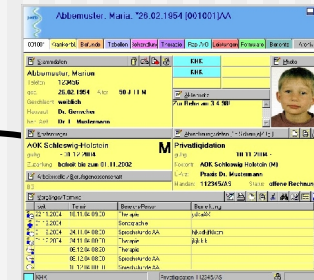

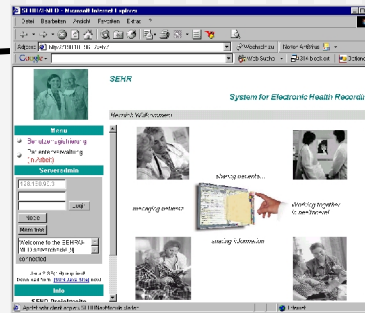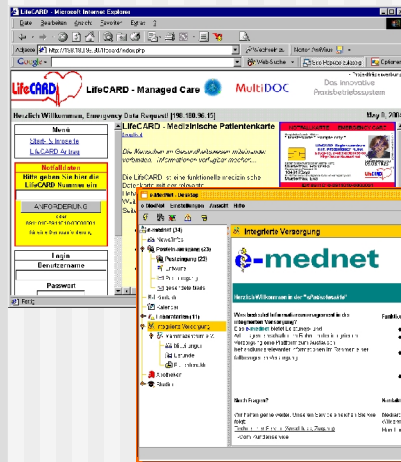Case coordination by a Manged Care Center

Disease Management defined by a specialist (the process owner)

Involved Homecare and Private Practicioners

interfaces e.g. GEHR, HL7

sharing data with other systems

Getting results of a diagnostic center jit

Summary

SEHR is based on a concept sharing data in healthcare to keep the quality untouched but also to improve quality focusing the problems of growing costs in health care. Sharing resources and making the informations, just-in-time' reusable as required is one the main goals of SEHR.

The authors of this concept, a case orientated, process based management in a close conjunction with 'real-life' shared care of today's regional communities, started in 1989 to evaluate their idea at different pilot projects. They have setup different field trials, i.e. a documentation and resource planning (scheduling) system at a medical facility for diabetic care with >12000 continuously managed patients per year. Another facilty has a throughput of > 75000 patient files since 6 yrs. working with SEHR, some of the patients are already manged in a 'follow-up' program.

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