

Baltic eHealth

- Technical, legal, organisational and financial challenges addressed in practice – an eHealth collaboration contract***

Peder Jest

Medical director

Sygehus Fyn- Region Syddanmark



Peder.jest@shf.regionsyddanmark.dk

From the view of a clinical director: Questions asked????

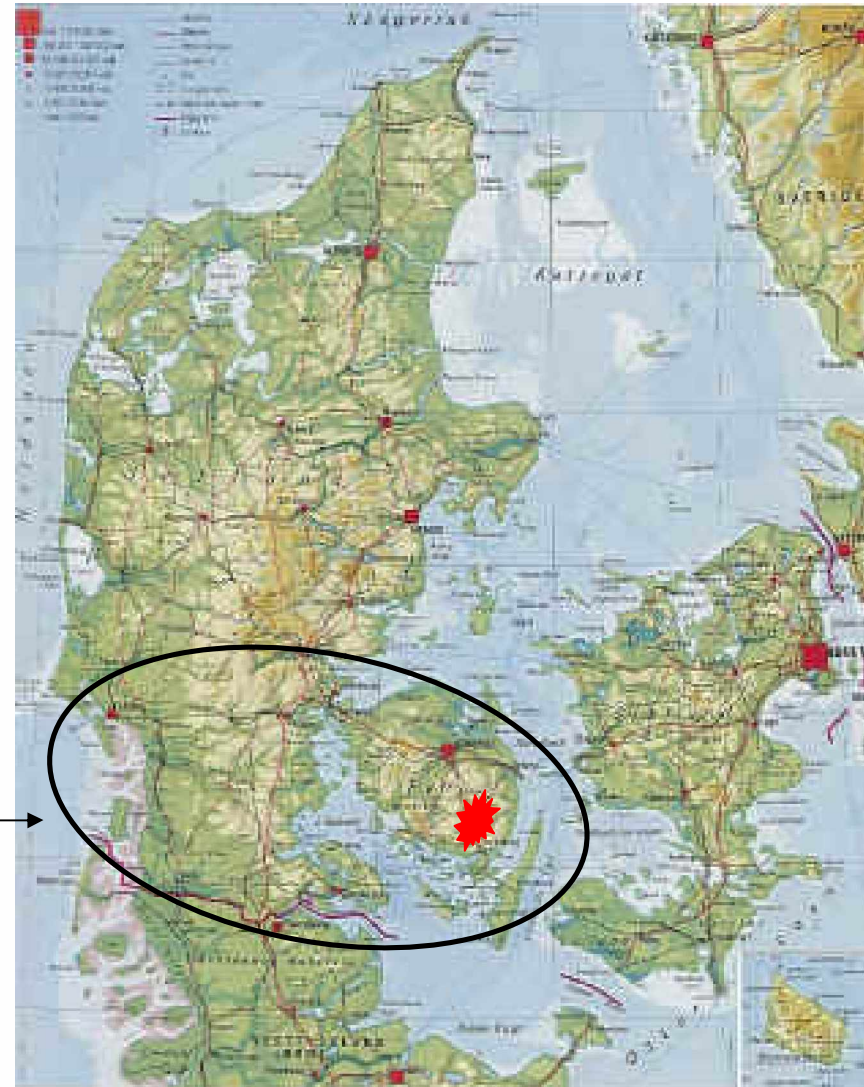
- Hospital related backgrounds ?
- Demographic and epidemiological background?
- Why telemedicine as a clinical and strategic tool ?
- Examples of telemedicine networking inside a hospital region?
- Why and how telemedicine solutions across borders?
- From project to daily business?

Denmark

Region South Denmark:

- 15,000 square km.
- 1.2 mil. inhabitants
- Budget 5 bill. €
- One University Hospital
- 5 regional hospital systems

**Region South
Denmark**



Funen Hospital, DK

32.000 admissions/ year

Population 200.000

150.000 out-patient visits/ year



The patient principle

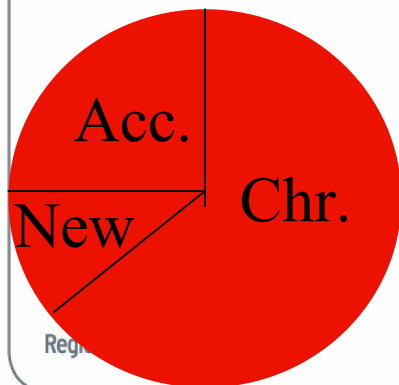
- That we at any time can offer the patients the most competent treatment
- That it happens within national and international standards and recommendations
- That it happens within the economic resources given
- That it counts for every patient
- Health professionals adapting to the *customers'* expectations

Implications

- The demographic change in EU:
 - A population of elderly persons, more than 20 % > 65 years
 - Longer expected lifetime
 - Living with several chronic diseases
- Patients expect ambulatory functions
- Fewer local hospitals and fewer hospital beds
- Telemedicine can partly solve the centralisation-decentralisation problem
- Constant changes in hospital and health structure

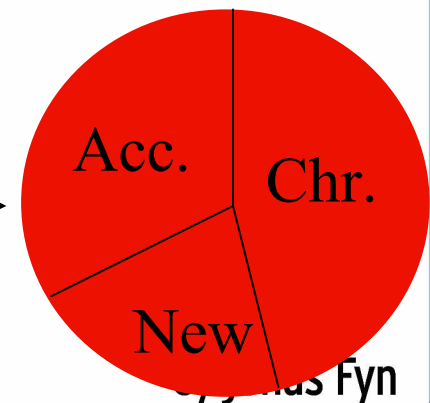
The future

- Demography: more elderly people
- More chronic diseases, several for the single person
- Fewer accidents
- Only few "new" diseases
- Diagnoses still a result of lifestyle combined with genecity:
 - Art. Diseases. Cancer, pulmonary dis., Skeleton and muscle dis., diabetes, psych. Dis.



← 2020

2004 →



Regi
79
Fyn

Important issues

- Medical events/quality must be registered and documented
- The resources of the physicians must be used appropriately
- Extended demands to optimize the patient pathway are mandatory
- The increasing number of patients with chronic diseases needs special attention

Telemedicine - experiences

- How?
 - Equipment and network
 - Education in videoconferencing systems etc.
 - Choosing the right medical specialists
 - Choosing the right diseases and patient groups
 - Cooperating across sectional borders

Telemedicine - experiences

- Why:
 - it's possible
 - It's cheap
 - We have the network
 - Lack of doctors and nurses (In DK)
 - It's crucial to have equal access to health services
 - The patients want it
 - We have to follow quality standards and indicators

Demands when working with health IT:

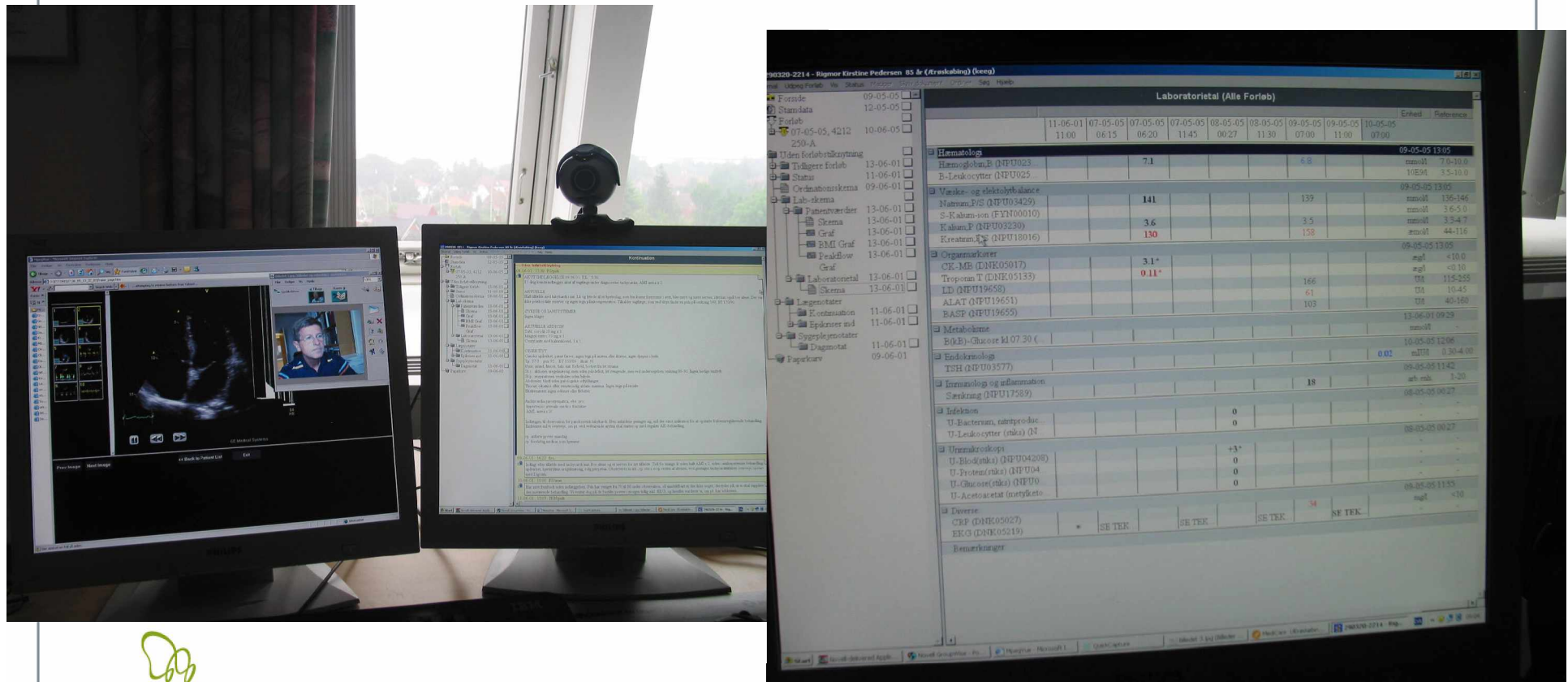
- Technology background incl. network
- Advantage: Electronic Patient Record
- Guidelines and instructions for patient contacts
- Staff educated in use of telemedicine
- Involvement of leaders and managers at every level
- Evaluation of Medical Technology, evidence and economy
- Research and development

Action Plan

- Top-down, bottom-up, top-bottom around
- Strategic goals: health for everyone. Effectiveness, value for money, quality, patient safety- adverse events.
- Managing the projects (money etc.)
- Courage to move from projects to daily activity (risk-management)
- Coordination with EHR. Data in – data out.

Electronic Patient Record: a nice condition

Multidisciplinary patient records in all departments and units, 1500 users



Telemedicine as a clinical tool

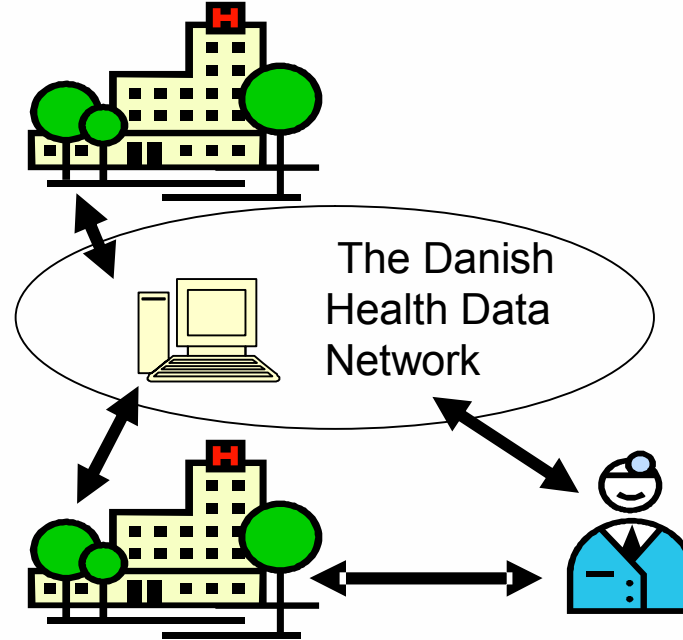
- Planned on-line consultation
- Planned off-line consultation
- Acute consultation
- Distance functions
- Preparing operations
- Discharge and transfer
- Home visits
- Second opinion
- Conferences

Health IT-/ telemedicine projects:

- Cooperation with Alcohol Abuse Centre
- Baltic eHealth
- R-Bay
- Health Optimum - market validation
- Health Optimum – initial deployment
- Better Breathing
- Diabetic eye background investigations
- Tele-ECG in ambulances
- Videoconferencing operating theatres og robot technology
- Etc.

Cardiology og Endocrinology

SHF Svendborg



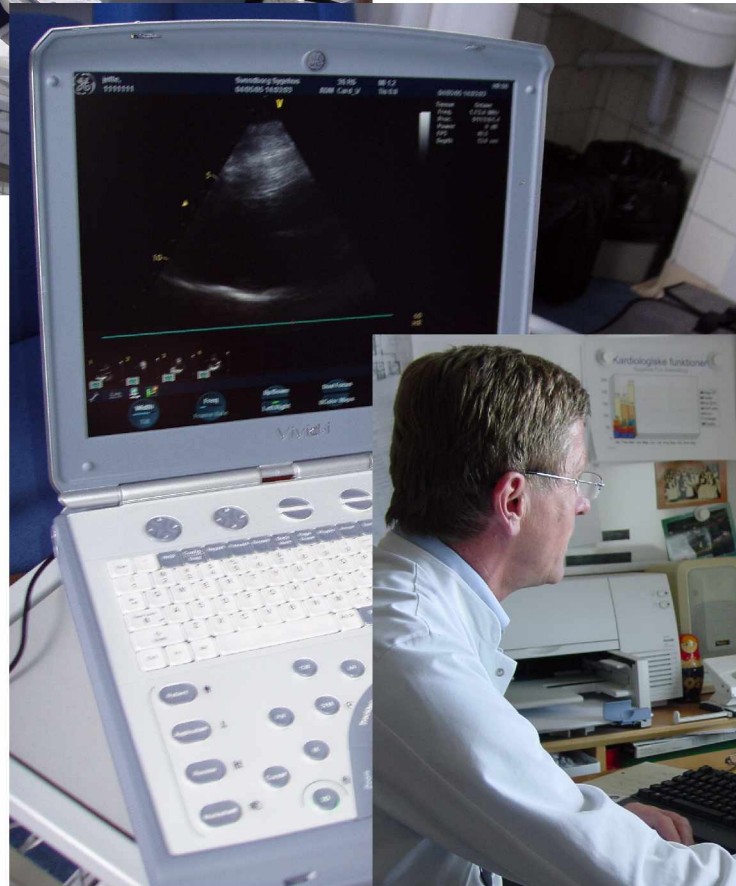
Example: outpatient clinic

Ærø

4-6 patients per day

specialist consultation: 2 times/month

In one year: 200 consultations





eRadiology pilot



Structured Reporting Tool

Structured Reporting Tool - Mozilla Firefox




Filer Rediger Vis Gå til Bogmærker Funktioner Hjælp

http://83.90.36.36/read/update?report=1&examination=3&language=1

Gå til

SRT - First Reading Examination List Log out


Add Report Delete Report Images Show Examination End First Reading

Select Language: ()  

Patient ID: 101267-1121 Name: John Smidth AC number: 343

Reports:

Right knee



Expand Normal

Expand Osteoarthritis

Collapse Rheumatoidarthritis

There is periarthicular osteoporosis and soft tissue swelling .

There is a joint space narrowing affecting medial compartment .

There are pocket erosions .

There are joint erosions.

The joint space is irregularly widened .

Free text sentence

Add Free Text Sentence

Expand Free text diagnose

Add Free Text Diagnose

Structured Reporting Tool

Færdig Adblock

eRadiology pilot

- Problems:
 - Sygehus Fyn (SHF): lack of doctors (radiology)
 - ➔ waiting lists – patients have to travel to other hospitals
- Solution:
 - X-ray performed at SHF are sent to Vilnius and Tallinn
 - ➔ Description performed in Vilnius and Tallinn
- Goal:

• From EU-pilot to a daily business model.

Management focus

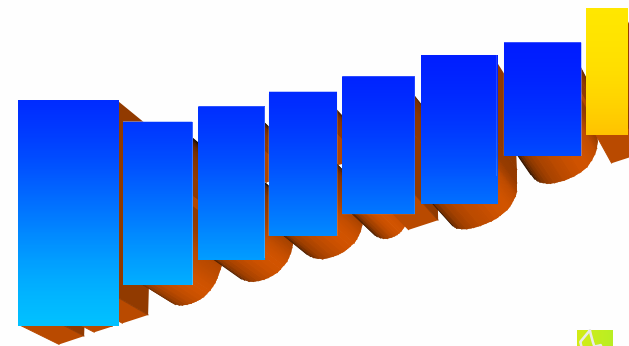
- Telemedicine as a strategic goal
- Knowledge, awareness, understanding of possibilities
- Support of project management
- Clear and well-defined objectives
- Leadership in cultural change in the organisation(top-down)
- Risk management/Investments in IT and change af work flow
- PR-strategy showing the advantages
- From project to daily activity (**difference between administration and management**)

eRadiology contract between

Svendborg and Tallinn & Vilnius

Baltic eHealth result: Business contract

- Cross-national eHealth infrastructure
- Important issues and demands:
 - Technology
 - Legality
 - Economy
 - Duration
 - Quality, ex. Double readings
 - Work flows and response time
 - Patient safety and liability



Contract in Eu-project
to contract in daily business
between partners



CONTRACT

Border Crossing Teleradiological Services within EU

The County Hospital of Funen (CHOF) and Vilnius University Hospital Santariskiu Clinic (VUH) agreed upon the following contractual clauses in order to regulate border crossing teleradiological services between the parties and adduce adequate safeguards with respect of the protection of patient's privacy.

Definitions

<i>Data subject</i>	a person who can be identified, directly or indirectly, in particular by reference to an identification number or to one or more factors specific to his physical, physiological, mental, economic, cultural or social identity
<i>Data Exporter</i>	party who transfers personal data
<i>Data Importer</i>	party who receive personal data intended for processing
<i>Personal data</i>	information relating to a data subject
<i>Processing</i>	any operation or set of operations which is performed upon personal data, whether or not by automatic means, such as collection, recording, organization, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, blocking, erasure or destruction
<i>The data subjects' consent</i>	any freely given specific and informed indication of his wishes by which the data subject signifies his agreement to personal data relating to him being processed

**Region South Denmark
General Hospital Funen
HR and Management Secretariat
May 2007**

LETTER OF INTENT

Between the parties

General Hospital Funen
Vilhelmskildevej 1 E
DK-5700 Svendborg

and

East Tallin Central Hospital

discussions concerning the possibility of establishing mutually binding cooperation have taken place at the "E-health in the Baltic Sea Region" conference in Stockholm on May 21 – 22, 2007. The cooperation will be based on the EU development project "Baltic e-Health – Border crossing teleradiological services", which is planned to phase out (by the end of) August 2007.

The cooperation shall include two principal areas:

1. Operating Agreement
2. Development Agreement.

Re. 1:

It is the intention of the parties that, based on the framework of the current project agreement, an operating agreement be drafted between the parties.

The parties realise that it will be necessary to prepare the operating agreement in two stages. The reason for this is that the present system is not capable of transmitting the X-ray images, only the accompanying description. When the PACS system has been implemented, it will be possible to transfer X-ray images between the parties at a reasonable cost.

The current volume of knee joint radiographs to be exchanged under the "border crossing teleradiological services" project has been set at 25 radiographs per month, but the volume will, in reality, reach the double amount. It is the intention of General Hospital Funen that this number will not decrease during the contract period.

Thank you for your attention!

- MedCom: www.medcom.dk
- Region South Denmark:
www.syddanmark.dk
- Sygehus Fyn:
www.shf.regionsyddanmark
- Baltic eHealth:
www.Baltic-eHealth.org
- eHealth Portal:
www.sundhed.dk/info/english



Daily business solutions at Sygehus Fyn

- Tele-endocrinology
Tele-cardiology
- Tele-alcohol treatment
Videoconf. therapy
- Videoconf. K-OUH
(colo-rectal diseases)
- Videoconf. OP.theatres
Nyborg-Svendborg
Tele-COPD
(stable/unstable
phases)
- Tele-radiology
(Svendborg- Ærø,
Tallinn- Vilnius, PACS)
- AI in rehabilitation
(Heartrehab.)
- Tele-dialyses, Tele-
neurology and
Tele-neonatology
- Videoconf.(Community)
- OP-robot technology

Managing strategy?

