

sundhed.dk

The Danish National e-Health Portal

Health 2.0

CEO: Morten Elbæk Petersen

The Danish Health Care System

- Public health care (85 % of costs are financed through taxes)
- Free access to most health services for all Danish citizens
- A homogenous health care system

3 levels:

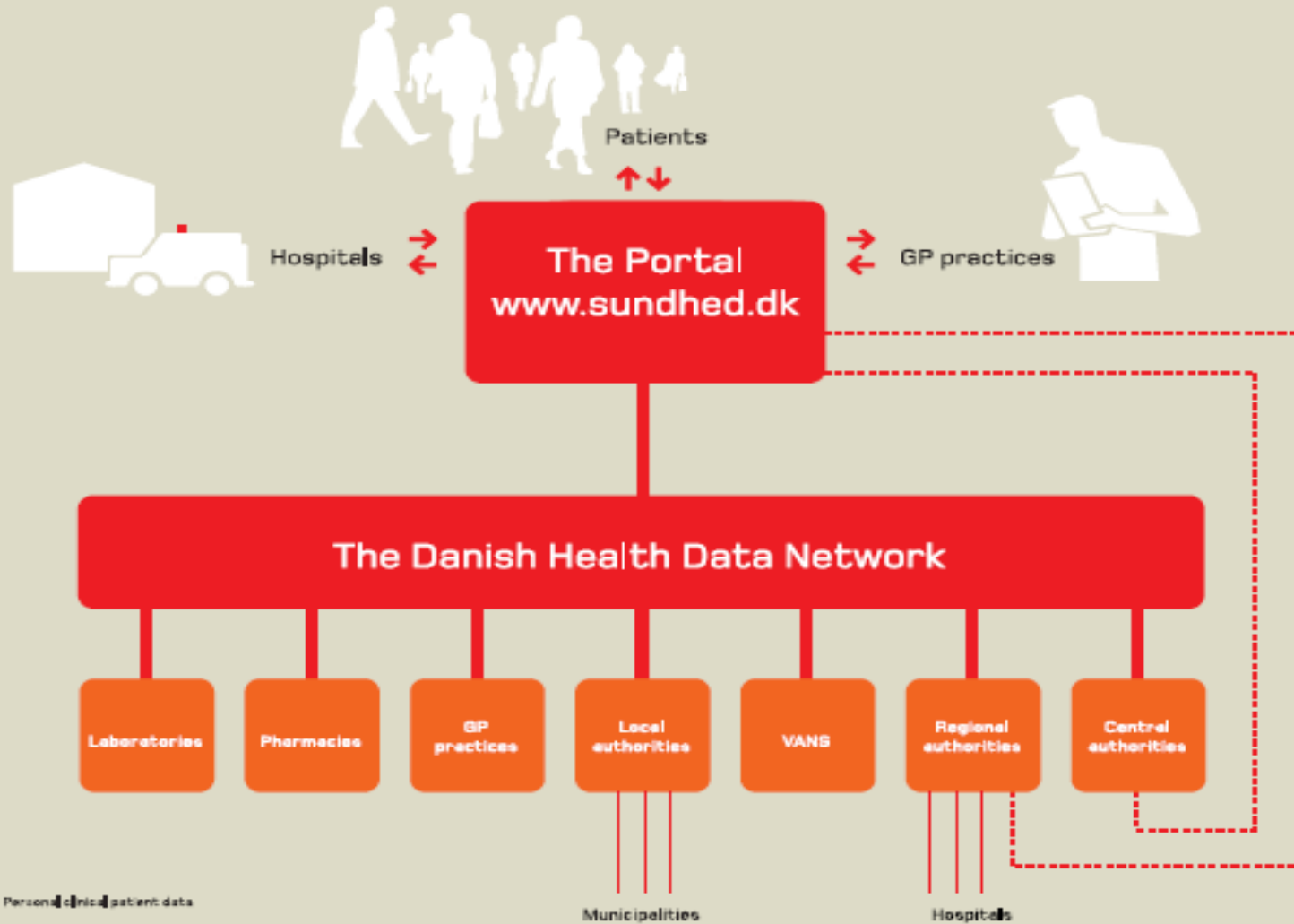
NATIONAL: Parliament, Government / Ministry of Health; makes the laws for the two acting levels

REGIONAL: 5 Regions; Hospitals (about 80), Psychiatry, Primary health care, e.g.

LOCAL: 98 Municipalities, Child nursing, Home nursing, Preventive treatment and health promotion eg.

Time line: Development in Danish health it

- 1992: Health Data Network established
- 1994: MedCom established to standardize messages
- 2001: The regions involve the national government in the establishment of a National eHealth Portal
- 2003: the eHealth Portal (sundhed.dk) is launched
- 2004: the eHealth Portal supports log-on, and displays personal information
- 2008: Patient-to-patient dialogue introduced on sundhed.dk
- 2009: the eHealth Portal updates platform
- 2010: All regions make EHR's available using the same standard



Objectives for sundhed.dk

Sundhed.dk:

- information related to the use of the healthcare service
- communication between patients and the health care service
- support the patient in attending to his or her individual health situation.
- inter-patient communication on how to cope with chronic diseases; "online patient networks"

Sundhed.dk is a national framework and a national integration platform which integrates data from 85 (existing) sources

Features: *Citizens/Patients*

Directory of names and addresses

- Contact information
- E-services (booking, prescription renewal, consultation) (log on)
- E-commerce (pharmacies) (log on)
- Comparison of prices, quality and accessibility

Information about prevention and treatment

- Medical information (eg. information about treatments)
- Waiting list information from hospitals
- Patient satisfaction measures on every hospital dep.
- Smileys for every hospital
- Preventive medicine
- Health laws and regulations
- Patient to patient dialogue – connecting patients coping with similar issues

Access to own health data (log on)

- Cross-sectorial personal electronic medicine profile
- Patients' medical history (since 1977)
- Electronic Health Record (from hospital records)
- Online Donor Registration and access to own data

Features: *Health professionals*

Information for GP (log on)

- Web access to laboratory data
- ICPC search of diagnoses from GP's electronic healthcare program (Linkportal)
- Online access to Medical Handbook (open for all users, but aimed at GP's)

All Health care professionals (log on)

- eMedicine records
- Electronic patient records etc (almost total coverage of the 5 regions)
- Waiting list information from hospitals
- Cochrane library

Regional and national information

- Contact information (authorities, departments, health personnel)
- Information on referral principles to hospitals/regions
- Preventive medicine
- Health laws and regulations
- Laboratories and consultants

Evaluation and challenges

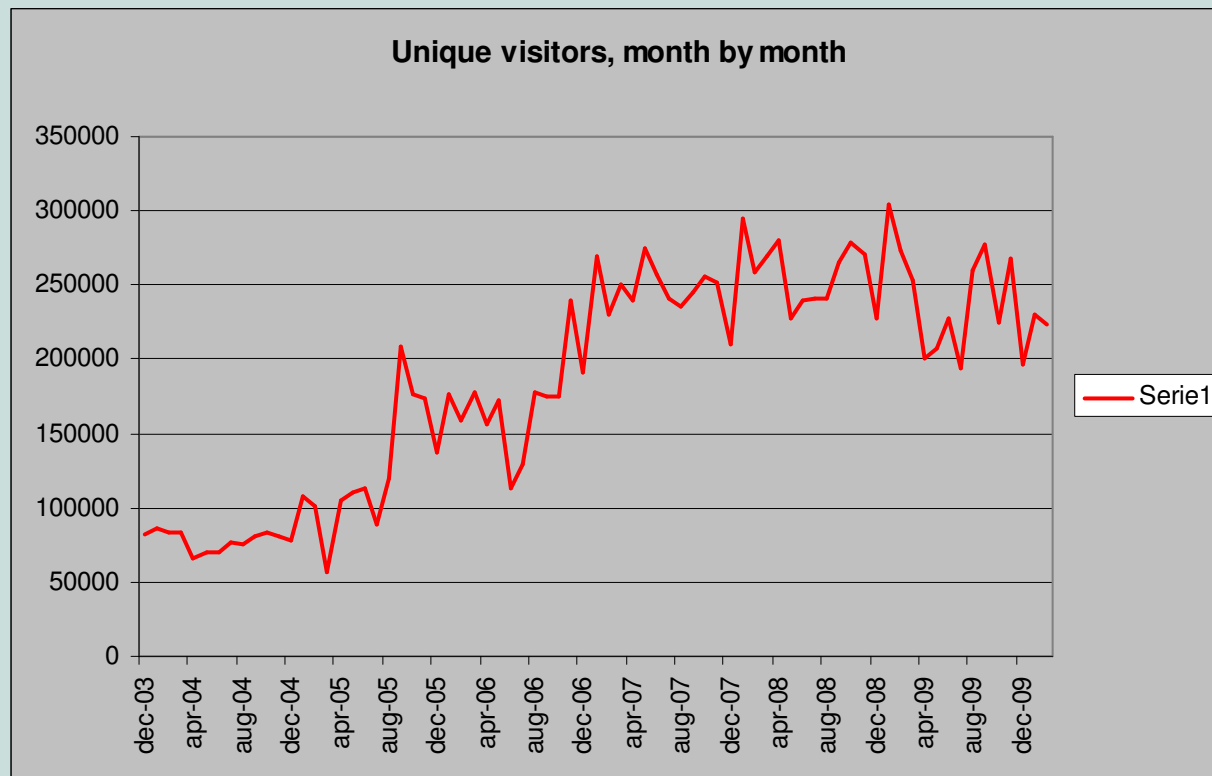
CEO: Morten Elbæk Petersen

How to measure the success?

Signs of impact:

- Acceptance from the public
- Acceptance from clinical staff
- International and peer recognition
- The owners' willingness to invest further

Public acceptance: Total unique visitors 2003 - 2010



Specific results from patient-to-patient dialogue

- Since 2008 hospital wards and patient organizations have cooperated to create on-line dialogue where patients with similar chronic diseases can share experiences.
- Evaluation >>> patient networks:
 - many readers (anonymous users) that return frequently
 - fewer "bloggers"/contributors (10 %).
 - Real interaction and exchange of advice and contact
 - Many patients respond that they find new information and knowledge of how other patients experience their condition.
 - Most find that the information puts them at ease while a minority become more anxious.
 - not 100 % clear if patients find that their lives have improved due to the patient networks online.

Acceptance from clinical staff

- 1/3 of the users on a daily basis are health professionals
- the digital exchange of patient data saves time for the patients and for professionals.

International and peer recognition

- **EU-award 2004: e-health**, along with MedCom
- **Top of the web 2005** by The Danish Ministry of Science, Technology and Innovation and The National IT and Tele Agency
- **E-commerce award 2006** by The Danish eBusiness Association and The Danish IT Industry Association
- **The digitalization award 2006**: by among others The Digital Taskforce, The Ministry of Science, Technology and Innovation and The Danish IT Industry Association
- **The Computerworld Honours Program 2007** – the committee was searching for organizations and institutions that are creating the global best practice in leading the worlds ongoing IT revolution.

* Top spot for Denmark in Health Consumer Powerhouse rating 2008 attributed to sundhed.dk

* The eHealth portal singled out as leading worldwide by ITIF - The Information Technology and Innovation Foundation (ITIF) based in Washington, DC.

The owners' willingness to invest further

- The partners have raised the budget 20% from 2010.

Existing 2.0 features and use

- Patients in AC therapy or with diabetes can contribute with data and receive advice
- Upon identification, the most recent data from different sources are highlighted for the citizens (called Mit Sundhedsoverblik, My Health at a glance)
- Patient to patient dialogue – connecting patients coping with similar issues – 2nd version platform launched soon

Plans for further 2.0 development

The strategy for 2010-2012 includes:

- More patient-to-patient dialogue
- Extended opportunities for the citizens to comment and add data to their own records etc.
- Providing sundhed.dk-services as content for other platforms.
- Telemedicine
- Enabling access from mobile phones.

Lessons for other parts of Europe

Success can be replicated but most likely in countries with

- homogenous health care system
- one source of financing for health care
- free choice of health care provider within a cooperating sector
- equal focused on transparency for the citizen, quality improvement and cost reduction
- agreed standards of data exchange between operators and authorities
- a high level of trust regarding the public sector and the access to personal information