NATIONAL PATIENT PORTALS: 
WHY, HOW AND THE FUTURE?

Morten Elbæk Petersen, CEO
TODAY’S AGENDA

Sundhed.dk: The Danish eHealth portal

How to implement eHealth

Patient empowerment

Outlook 2030: The future of eHealth?

Sundhed.dk’s steps towards the megatrends
SUNDHED.DK TODAY

The Danish public health care system online

Citizens
- Personal services
- Data/records

Health professionals
- Patient data
- Administrative tools

1,400,000 unique users / month

The application most health care professionals use (5th year)
Den offentlige sundhedsportal

Tryghed lige ved hånden.
Her kan du finde information om sundhed og sygdom, og du kan logge på og få adgang til dine sundhedsdata.

Læs mere om dine muligheder på sundhed.dk

Dine sundhedsdata

Med nem-id kan du logge på sundhed.dk og se dine sundhedsdata, fx:
- Journal fra sygehus (e-journal)
- Behandlinger på sygehus
- Donorregistrering
- Laboratorieresvar

Få mere at vide
Log på sundhed.dk

Find behandler

Find behandler i sundhedsvæsenet og se vurderinger.

Sundhedsområde:
Alle områder

Region:
Alle regioner

Behandlerens navn:

Udvidet søgning

Din sundhedsjournal

Med sundhedsjournalen får du overblik over dine sundhedsdata.
Her kan du finde de seneste

Nyheder fra sundhed.dk

Midlertidigt ingen adgang til data fra egen læge i Sundhedsjournalen

Ebrd opbakning til at sundhedsfaglige kan sla patients data op

Datasikkerhed

Hvem kan tilgå dine sundhedsdata?
Hvem kan se berns data og hvordan beskytter NemLog-in

Spørg din læge

Når du stiller spørgsmål til din behandler, bliver du klogere og din læge får et vide, hvad der galt, først og fremmest i sundhedsområdet.
HOW?

Homogeneous healthcare system
Public and private co-development
Engagement of all stakeholders

Joint strategy, investments and solutions

Common infrastructure and systems

Culture of trust
Shared values and visions
Transparency
Will and courage
INTERNATIONAL SURVEY ON EHEALTH

Measured on
Quality of it systems
Functionality
Practical application
Equal possibilities for all citizens/health professionals
Coherent and efficient

High level of quality across the country
SUNDHED.DK IN THE FUTURE?
HOW TO KEEP MOMENTUM AND STAY A LEADING NATIONAL eHEALTH PLATFORM?

Follow trends, developments, innovations

Pragmatic focus
Coherence / Glue between sectors
Homogeneous system
Reducing spendings: More Health for the money
GOING MOBILE

Freedom and flexibility

How, who & when?

On-the-go: more coherent, yet complex and dynamic picture of the patient’s health situation
GOING MOBILE

Where is sundhed.dk?

Today: 40 percent of users access the portal from mobile devices.

2016: all solutions/services are accessible from mobile devices.

Will web/portals survive?
 Patients can access data (lab.results, EHR etc.) at the same time as health care professionals.

IT infrastructure that collects real-time patient-event data and closely monitors critical patient-related conditions.

Patients in a new position: Awareness, Action, more proactive and less reactive = co-writer.
9/9/15: Huge step towards Real Time
Reduced delay in patients’ access to data from 2 weeks to 72 hours.

Next step (2016) Ambition/plan: immediate-access to data
Health care professionals’ consent is crucial

Technically possibly NOW
NEW RELATIONSHIP: PATIENT - DOCTOR

Doctor’s role:
Collector – Documentor – Helper – Colleague – Mentor
SHIFT OF FOCUS

Patient and end-user experiences

Performance and availability

Obsession with privacy/security

Exchanges (Public and Private)

Virtual consultations
PATIENT EMPOWERMENT

Mega-trends

Knowledge & information
Understanding information from health professionals

Health equity

Appropriate use of the health system

Activation & Co-playing /commitment

Increase in self care

sundhed.dk

8 October 2015
HIMSS CIO Summit
NOT ONLY THE RESOURCEFUL

Low income
No/low education
Unhealthy lifestyle
Rarely consults GP
Needs motivation
Know more? sundhed.dk Foundation

Why?
Huge international interest in sundhed.dk and Danish eHealth

Purpose:
Consultancy: many years of experience
Fast, cheap solutions
Reliable and public-private-network
Mature eHealth projects / Trade promotion

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E-NABIZ

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@ enabizsistemi
Enter e-Nabiz

https://enabiz.gov.tr
https://enabiz.gov.tr
e-Nabiz Services

Patients have access to following services and information.
✓ Visit Records and details.
✓ Radiologic Images and Reports.
✓ Diagnosis
✓ Test Results.
✓ Prescriptions.
✓ Allergy management.
✓ Health Reports.
✓ Appointments.

@ enabizsistemi
e-Nabiz Services

- Emergency Notes.
- Documents.
- Immunization dates.
- Organ Donation.
- Blood Donation.
- Medication Reminder.
- Wearable Health Trackers Synchronization.
Visits

✓ Visit details include: Examinations, Diagnosis, Reports, Treatments, Prescriptions, Medications, Images, Allergies and Activities.

✓ Visit details can be shared by Patient. Patients get to choose with whom to share and the duration of sharing.
Prescriptions

- Prescriptions are available online.
- Medication side affects can be recorded in the system.
- Medication information can be found in the system as well.
Diagnosis

- Diagnosis and related information is easily accessible.
Reports

✓ Patients reports are accessible and available to patient anytime.
Test Results

- Patients can compare their lab results with previous ones.
- Lab results can be shared and exported as PDF.
Tele-Radiology

✅ Patients are able to securely view as well as share their radiologic images and reports.
Blood Donation

- Integrated with Red Crescent.
- Patients can become blood donors through e-Nabız.
- Convenience is provided for blood donors.
Organ Donation

✓ Patients can donate their organs through e-Nabız. We are integrated with Organ search and delivery services.
Allergy Management

✓ Allergies can be registered through enabiz such as medication, food and others.
Emergency Notes and Documents

✓ Patients can register emergency notes as well as documents.
Appointments

✓ e-Nabiz enables patients to book their appointments secure and easily.
Sharing

✓ By default nothing is shared. After two step verification patients can share their data with the ones patients choose.
Profile

✓ Patients can manage their profiles.
Opting-out

- Temporary & Permanent opt-out with two factor verification
- No records of patient will be kept in e-Nabız during opt-out duration.
Privacy & Security

- Standards and policies on health information and records.
- e-Nabiz embrace PII and PHII compliances.
- Patient data is de-identifiable and encrypted.
- e-Nabiz has Audit logs, Access logs, History logs, and Activity logs.
e-Nabız Mobile

e-Nabız indirmek için
App Store

e-NABIZ İNDİRMEK İÇİN
Google™ play
Mobile Services
Vital Sign Charts

Radiologic Images
Medication Reminder
Emergency Button
Wearable Health Trackers & Mobile Integration

- Wrist bands
- Weight
- Blood Pressure
- Glucose
- Respiratory
- Fever
Analytics and Business Intelligence

- e-Nabız also provides robust real-time fine grained analytics and dashboards in a separate project, health management system.
- Financial, administrative and clinical tools empowers health executives for better decisions, investments and management.
THANK YOU!

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@ enabizsistemi
Patient Portals for Connected Care

Hyleco Nauta
Director of Information Technology
Our patients’ needs

"I wish to receive personal, customised care of the highest quality. Care which contributes to my quality of life and is delivered by a trustworthy and skillful partner."
The healthcare paradigm is tilting...

“How do we - as healthcare provider - earn a place into the network of the patient?”
Connected Care

Ambition: Creating a continuum of care

“Realizing 'patient empowerment' through a 'continuum of care' by developing and applying an integrated care concept using innovative tools available for the patient.”
Real time access to EMR “empowers” patients

Patient Portal *Mijn UMC Utrecht* facilitates patients (adults and children) to engage actively in their health care process by providing access to information and resources. This enables patients to make informed decisions about their health, enhancing *shared decision-making* and *patient empowerment*.

Having patients with a stake in the quality of their personal health care is the key to getting better outcomes and *improving quality of care*.
Real time access to your own data: current features of our patient portal

Medical records
• Consultation reports
• Hospitalization and operative reports

Results
Laboratory, pathology, endoscopy, radiology, virology and bacteriology results and allergies

Medication
Overview of current and previous medication

Vital statistics
Heart rate, blood pressure, respiratory rate, SpO2 (oxygen), temperature, length, weight, BMI, pain score

Patient letters
E.g. referrals, discharge summaries, letters to the GP
Current features (2/2):
Digital interaction with your personal healthcare provider

- **E-consult**
  Exchange secure e-mail with your health care teams

- **Medication requests**
  Request prescription refills

- **Questionnaires**
  View and fill questionnaires

- **Personal information**
  View and update personal information

- **Appointments**
  View, schedule and keep track of appointments

- **Information leaflets**
  View educational materials
6 months after release:
- excellent new direction
- consider some enhancements

Gradual adoption. We are learning how to integrate with existing processes. On-going evaluation process.

Transparancy

Shared decision making

Improve interpretation of results

Successfactors:
Top down implementation
Integral approach re. usability, acceptance, legal, privacy, security, ict.
Challenge after the next step: How can patients benefit from “big data”? 

“Offering 'personalized healthcare' by using big data analytics in order to develop new insights and apply them in the care of patients.”
Thank you for your attention
Empowering Patients Through Portals

Yossi Cohen, MD
Clinical Adviser, InterSystems
InterSystems

~1,400 employees
35 countries

3 business areas:
① Data platforms
② Electronic patient record = TrakCare
③ Health informatics platform = HealthShare
InterSystems

- Financially strong
- Long term focus
- Able to invest

$489M

1978 - 2014
InterSystems’ Health exchange at Hixny

1.6 million people in New York state

Running on HealthShare

28 hospitals
>2,100 physicians
25 long-term care homes
7 home care agencies
6 behavioral health providers
21 radiology sites
5 standalone imaging centers
Traction is a challenge

2014 Patient Portal Activity (Cumulative)

Source: Hixny 2014 annual report
Patients are Consumers

Spain as an example
‘Healthy life expectancy’ OECD
~ over 60 years

Source: OECD
Patients are Consumers

- Less technology savvy
- More inclined to engage
- High expectations

- More technology savvy
- Difficult to get excited
- High expectations
“Consumers’” thirst

Example: Renal Data Collaboration project, UK

Source: Journal of medical internet research, Phelps et al 2014
Prerequisite: spot-on interface
Prerequisite: Health information exchange

“One stop shopping experience”

On average, a patient sees annually 7 clinicians in 4 different practices

Our portal is provided by and connected to our current EHR platform

Our portal is provided by an interoperability/health exchange platform vendor

Our portal was developed in-house

Our portal is provided by a population health management vendor

Unsure

Other

Source: Patient Engagement Study, InterSystems and HIMSS Analytics USA, December 2014
Value: trusted information

British Medical Journal, July 2015
Evaluation of 23 online symptom checkers.
Results:
• Correct diagnosis first in 34% of evaluations
• Listed correct diagnosis within the top 20 diagnoses given in 58% evaluations
• Provided appropriate triage advice in 57% of evaluations

Source: BMJ 2015;101h;342
Value: information in context, education

Why Patients Use the Hixny Secure Patient Portal
(percentage of total respondents)

- To securely view their community health record: 52%
- To access Patient Portal e-Library: 28%
- To view healthcare related news: 16%
- To securely transfer their health records to providers: 4%

Source: Hixny 2014 annual report
Value: information, adopt healthy behaviours

- Less technology savvy
  - More inclined to engage
  - High expectations

- More technology savvy
  - Difficult to get excited
  - High expectations

Prevention!
Value: information, adopt healthy behaviours
Value: **new information**

**Patient notification when new information available**
Value: patient services

**Request an Appointment**

If you have a Life-Threatening Medical Emergency, please call 911 or go to your nearest emergency hospital.

**Step 4 of 6:**
What is the best time for your appointment?

How soon would you like your appointment?
- **Next available opening**

Choose the best days and times for an appointment:

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Comments:
Enter a comment up to 1000 characters
Care Providers - the hidden consumers

Care Providers are best positioned to “sell” a portal to patients

Care Providers must benefit too!
The future

Top 5 most important ‘next generation’ portal features

Source: Patient Engagement Study, InterSystems and HIMSS Analytics USA, December 2014
Thank you

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