eHealth and Interoperability in the Netherlands

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Overview

- Sense of urgency for innovation
- Transition to patient centered care
- eHealth is necessary
- Interoperability is the keyword
- Collaboration between stakeholders is essential
The Netherlands

- Nearly 17 million inhabitants

- Multi-enterprise business model in healthcare:

  100 hospitals, 8000 GP’s, 1800 pharmacies, 200 locum tenency services for GP’s, responsible for own finance, medical policies, investments, and IT

Thus: interoperability problems are large on all levels
Mrs. Edith Schippers: Minister of Health, Welfare and Sports

From 14-10-2010
3 major trends in Dutch healthcare

- Increase in demand: chronic illness, ageing population, more treatment options
- Shortcoming in nursing & caring staff: 40% deficit in 2020
- Public health expenses grow faster than economic growth: compete with other social sector
Ageing population

<table>
<thead>
<tr>
<th>Age Group</th>
<th>2009</th>
<th>2025</th>
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<tbody>
<tr>
<td>65+</td>
<td>2.5</td>
<td>3.5</td>
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<tr>
<td>80+</td>
<td>0.5</td>
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</table>
Increase in chronic illnesses

Increase in % (2003-2025)
Changes in labour market towards 2025

Growth total labour force: 19,000

Growth employment in health care: 470,000
Growth in healthcare expenses
Transition in healthcare

• Need: think and act from the client point of view

• Patient central: start from patient needs and patient as co-therapist

• Participating healthcare (communication/interaction and self-management)
Disease management approach

- Patient-focused
  - Self-management
  - Tailor made personal care plans
  - Central coordinator/patient’ point-of-contact

- Health care standards: Integrated health care encompassing early recognition, prevention, self-management and adequate health and social care

- Multi-disciplinary approach (‘health care team’)

- Integrated financing
Facts from the advice Health 2.0 of the Council for Public Health and Health Care (2010)

• 90% of the Dutch households have internet access
• Google is the first action in case of health problems (36%), second a consult with the GP (35%)
• 22% discuss the information from internet with the GP
• 9% of the GP’s offer the possibility of a e-consult (2008)

Health 2.0 is an autonomous development
Definition eHealth

1. (In-home) Monitoring, disease management (support of compliance and personal goals) and feedback for selfcare;
2. EHR and the patient access to Electronic Health Record (EHR) under control of the Health Care Professional;
3. Control by patient of personal information and data in a Personal Health Record (PHR);
4. Protected video-, e-mail-, and messages communication between patients and social surrounding, (cloackcare) and healthcare givers;
5. Support of the chain of care (eg. electronic appointments; preparing information for a consult; referral information);
6. Online fora / communities about health and healthcare topics;
7. Personalised (medical) education systems.

Based on: Jimison, Oregon Health & Science University. Evidence-based Practice Center., &United States. Agency for Healthcare Research and Quality., 2008

Health 2.0 is no eHealth
but eHealth is Health2.0
The message of eHealth

• Without eHealth the health care sector will stuck down

• eHealth is a means to the transition in the care process

• eHealth = Health

• Safe and reliable exchange of data is a prerequisite for eHealth applications (EHR)
Barriers hamper the implementation of eHealth

- Pervers financial incentives in the caresector
- Hampered legislation and rules (eg system partition, privacy)
- Culture and support medical professionals and patients
- Application not integrated in the health care processs
- Supply of services and knowhow; not demand driven
- Medical evidence limited or lacking
- Uniformization and standardization
- Not invented here

**Interoperability is a keyword**
Interoperability

International approach is necessary

Standards: Mandate 403,
Usecases/profiles IHE
Continua

• Collaboration is the key word
Interoperability in the Netherlands

Orientation to international open standards and if possible open source software

• Support to international standardization(organizations) by the Netherlands Standardization Institute (NEN)

• NICTIZ has described all standards for the national infrastructure; for the implementation of the EHR

- Member of IHTSDO
- NICTIZ starts Interoperability Forum (development and maintenance of standards, protocols and profiles on IT healthcare) together with IHE and Continua
- Detailed Clinical Model’s
MOH: different roles at innovations

1. Director/manager   EHR
3. Stimulator         eHealth applications
4. Facilitator        eHealth applications

• Choice depends on:
  › amount of system failure
  › political and societal pressure

• Available instruments:
  › (tackle hampered) legislation
  › finance
  › community-building and sharing knowledge
MOH: Directors role at implementation EHR

First bottom up: sector in the lead, but politics thought that the slow progress was caused by lack of power to persevere

• So the Parliament asked: “Minister take the lead on implementation and control of the national infrastructure”

• That means:
  a. Facilitate: develop and control the ICT-infrastructure for the exchange of patient data with uniform standards,
  b. Stimulate: coordinate pilot- and test phase, coordination connections, communication & information to citizens,
  c. Legislation: citizen service number (BSN) and EHR (obligate connection for health care providers)
  d. Financial incentives: subsidy arrangement for pharmacist; GP practices and GP posts: € 45 million
Current situation EHR

Implementation Medication record and Patient summary on a voluntary base

To be decided in the Senate: an act for mandatory use of the national infrastructure for Health Care Providers

Costs from 2002 – June 2010: 217,5 million euro ....

Conclusion: Voluntary connection to EHR is going on
New legislation is not necessary for implementation of the EHR, only for the obligation.
Patient access to EHR

Patients have since longtime the right to access to their own record, but not necessary in an electronic way; they have the right on a copy of the record.

• Electronic patient access to their electronic record is a policy goal.
• Patient access is condition for parliament before the act on EHR will be obligate. After adoption of the act the obligation for HCP can become effective later on.

• Investigation report: The in-development method of access is not safe enough due to GSM hacking. The MOH investigate now for a safe solution, so realizing patient access will take longer for technical reasons.
<table>
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<th>To be connected</th>
<th>% Connected</th>
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<tbody>
<tr>
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<td>1948</td>
<td>32</td>
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<tr>
<td>Pharmacists</td>
<td>78</td>
<td>129</td>
<td>60</td>
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<tr>
<td>GP posts</td>
<td>629</td>
<td>4337</td>
<td>14</td>
</tr>
<tr>
<td>GP practices</td>
<td>14</td>
<td>95</td>
<td>15</td>
</tr>
<tr>
<td>Hospitals</td>
<td>1357</td>
<td>6509</td>
<td>20</td>
</tr>
</tbody>
</table>

30-06-2010  2,7 million available records
            1,2 consultations
MOH in stimulator/facilitator role for other eHealth-applications

• Control/lead primarily at the sector/industry

• Sharing knowledge: show possibilities & good practices (through eg Healthcare Innovation Platform)

• Organization round tables, meetings for exchange of knowledge (physically or through social media)

• Participation in agreements for breakthroughs in the sector
Together raise is the key for succes

Many stakeholders:
Patients/consuments
• Healthcare Professionals
• Insurers
• Branche organizations
• Industry (ICT, medical devices, services)
• Organizations:
  › NICTIZ (knowledge institute eHealth and interoperability)
  › NVEH (Dutch Union for eHealth)
  › NEN (Dutch Standardization Institute)
  › ‘eHealthNu’
• Government (MOH, other departments, international)
How to come to a breakthrough: an example

- Collaboration: Achmea, Menzis, KPN, Philips, Rabobank, TNO en ZIP/VWS
- Starting point: care close to the home
- Goals:
  - In 2020 eHealth services available on national level
  - In 2012 eHealth services for Diabetes en Chronic Hartfailure
- Actions:
  - Pre-competative appointments
  - Define common scope (Diabetes en Hartfailure as first casus)
  - Explore barriers and solutions with participants and participators
  - Management power
How should we cooperate

• Sense of urgency, agreement about paradigmshift

• No “poldermodel” but participation model

• precompetitive agreements,

• use of expertise (health care providers, patients and others)

• Changing participation with different expertise

• Commitment
Summarize: accents for next period

• Introduce structural tariffs and incentives, and take away perverted incentives

• Standardization and interoperability

• More attention to collaboration with parties; commitment on result

• Effect research to and development of eHealth

• Stimulate use of eHealth through health care professionals by good practices, coaching, education, etc.

• Further development of the national EHR-infrastructure for a safe exchange of data with access for the patient
Thank you for your attention

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