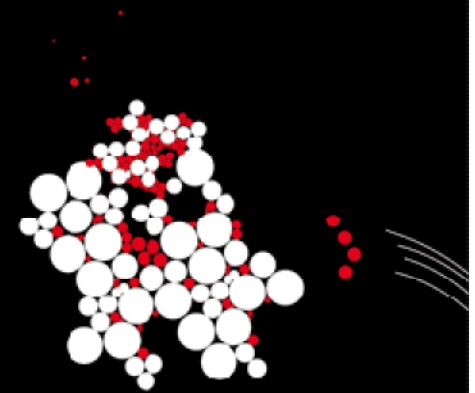


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**Panel Discussion at: The 4th International  
Conference on Digital Society (ICDS 2010)**

**Challenges of eTelemed for changing  
Healthcare**



Dr J van Gemert-Pijnen (moderator)

IBR - Centre for eHealth Research & Disease management



St Maarten, eTelemed, 11 February 2010



## PANEL Digital Society Trends: Challenges of eTELEMED for Changing Healthcare

---



**Sinclair Wynchank, Medical Research Council, SA**

**José Joaquín Mira, Universidad Miguel Hernández SP**

**Stein Olav Skrøvseth, Norwegian Centre for Integrated  
Care and Telemedicine, N**

**Carl Brandt, Stenstrup General Practice, DK**

**Hans Ossebaard&Lisette van Gemert-Pijnen, University  
of Twente, NL**





**DigitalWorld 2010**

**New challenges from the Old World**

UNIVERSITY OF TWENTE.

## Panel procedures

---

- Self-Introduction of panelists
- Discussion-statements
  - Theme I: Information and technology
  - Theme II: Design and Implementation
  - Response from the audience
  - Response from the panel
  - Interaction between/among panel and audience
  - Island time .....however

# **Statements Theme I: “information & technology”**

---

- 1. User initiated health information to empower**
- 2. Simple, smart, affective technology to motivate**
- 3. ICT is important but does not stand alone**

## **Statements Theme II : “design and implementation”**

---

- 4. e-Disease management models for a better balance between self-care and professional care**
- 5. Participative design for better and innovative healthcare**
- 6. A holistic framework for high quality eHealth, to bridge the gap between technology and medicine**
- 7. eHealthwiki for high quality interventions**
- 8. Business modelling to make it real**

## theme I: information and technology

---

- Stein Olav Skrøvseth
- Jose Joaquin Mira
- Sinclair Wynchank
- Carl Brandt
- Hans Ossebaard

# 1. User initiated Health information

**Challenges of eTELEMED for a Changing Healthcare**

**Stein Olav Skrøvseth**

**NST, Norwegian Centre for Integrated care and Telemedicine**



# Challenges of Telemedicine

---

**Telemedicine has in many cases not gone into routine practice - why?**

- **Lack of incentives**
- **Unrealistic technology**
- **Cost/benefit analysis are difficult and unconvincing**

# The information challenge

---



- **User initiated information: Google/Wikipedia**
- **Health care initiated: Personal tools**
- **Moving care towards the patient**
  
- **Must ensure information is**
  - **High quality**
  - **Understood by the recipient**
  - **Perceived as useful by the recipient**
  - **Available at decision time**

## 1. User friendly Health information

---

**Trends in patient education via Internet.**

**Barriers to access health information for patients and Internet users.**

**Disadvantages from the doctors' point of view.**

**Future perspectives for the patient-healthcare providers interrelationship.**



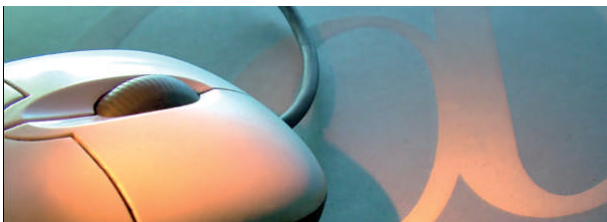
Research grant from the Spanish Health Research Fund  
(*Fondo de Investigaciones Sanitarias*), reference PI060574.

# Digital Society Trends: Challenges of eTELEMED for Changing Healthcare

Trends in patient education via Internet

---

- (1) user-orientation (friendliness) of the website;
- (2) analysis of the website content readability; and
- (3) assessment of website accessibility.

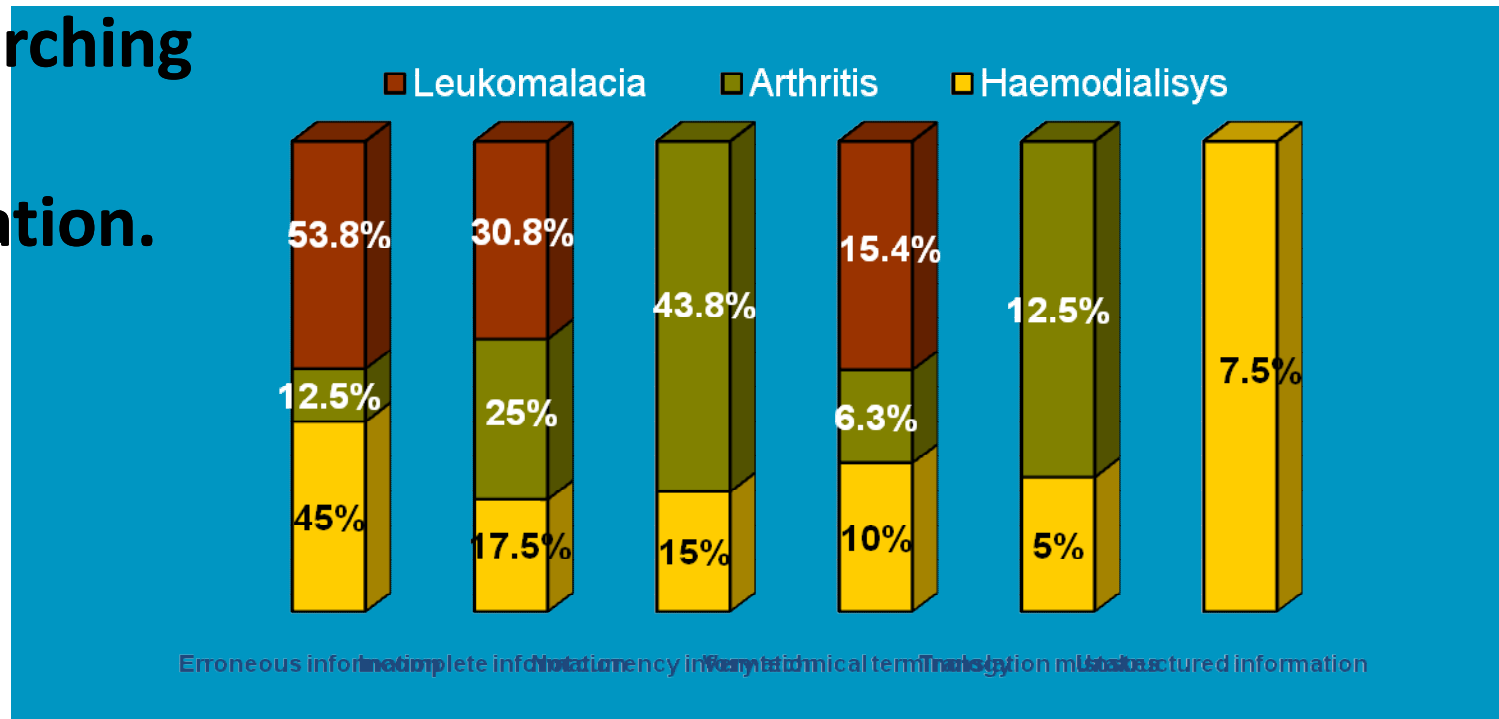


# Digital Society Trends: Challenges of eTELEMED for Changing Healthcare

Barriers to access health information for patients and Internet users.

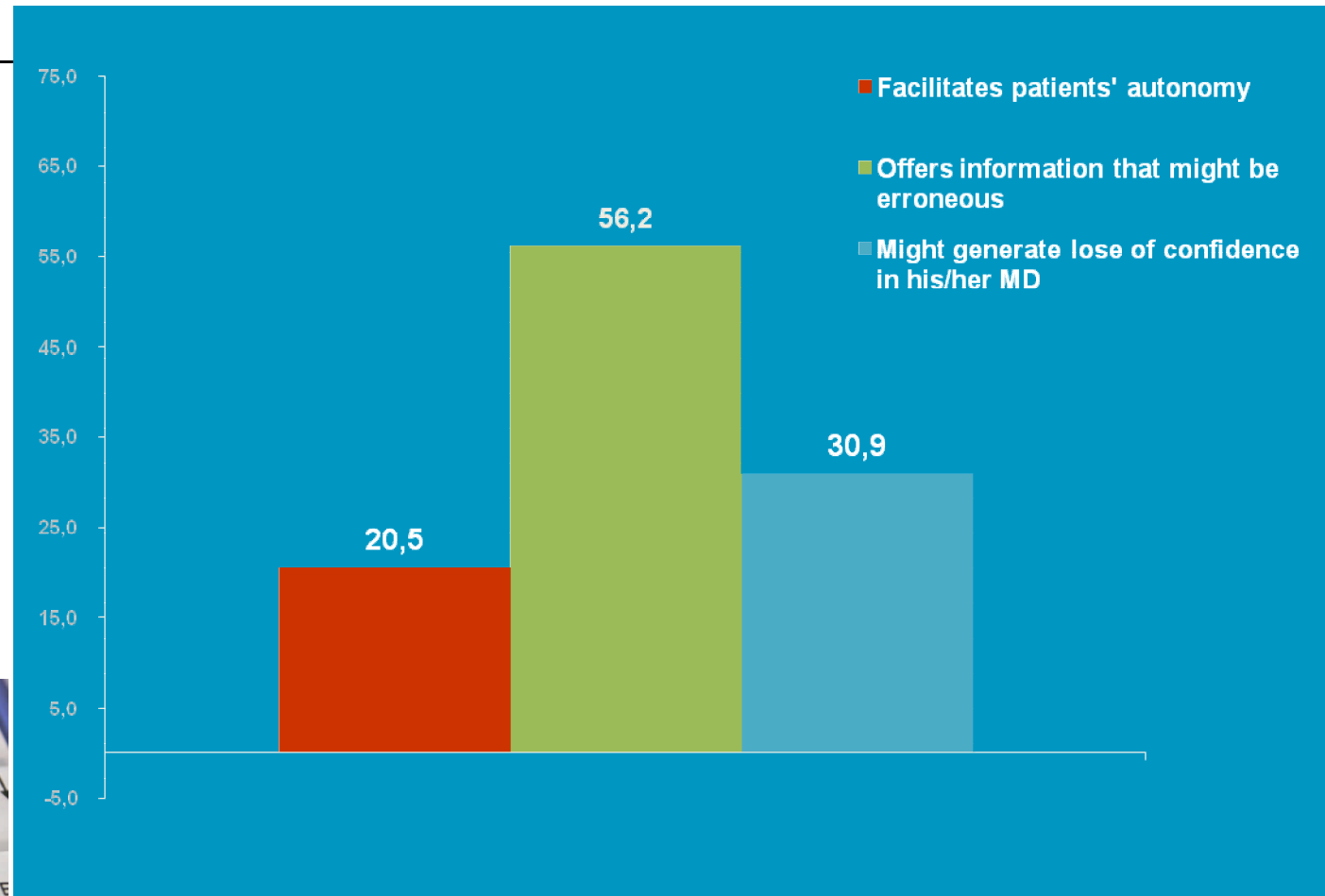
Tools for safety surfing on the Net searching health information.

The Flesch readability index  
Web Accessibility Test



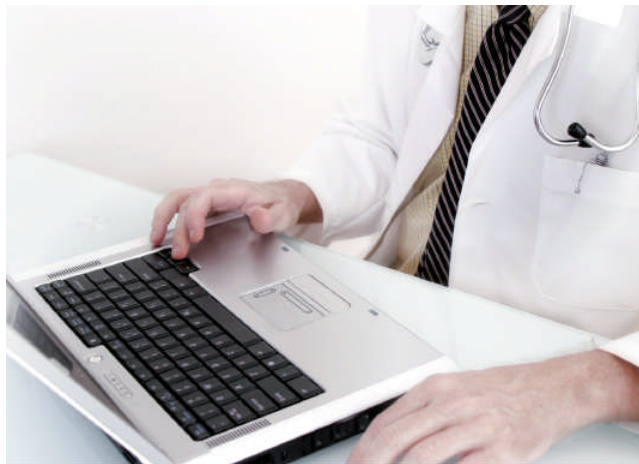
# Digital Society Trends: Challenges of eTELEMED for Changing Healthcare

## Disadvantages from the doctors' point of view.



---

**Are actually there any advantages for the patients' autonomy and for making-decision in a clinical context?**



jose.mira@umh.es

## 2. Medical Trends & Smart technology

---

- **Sinclair Wynchank**

**[Medical Research Council & University  
of Cape Town, Cape Town, South  
Africa]**



## **a. TM Medical Trends**

---

### **Current TM activities (expanded & improved)**

**Access to Medical Specialties**

**Improved training/skills/mindset**

**Home TM for elderly/chronically ill (*much* better to be at home than in hosp/institution)**

**E-learning & Virtual Med Libraries**

**Communication amongst ALL stakeholders**

## **b). TM Technological Trends**

---

**More Tele Monitoring, Bandwidth  
More/Improved Internet use**

**Portable devices** (eg mobile phones, PDAs)

**Smart devices** (portable or wearable, eg smart fabrics) in network

- **to aid Diagnosis/Monitoring**
- **to assist & initiate procedures**

## **b. TM Technological Trends-2**

---

- **Smart Card use, Centralised Patient Data Bases**
- **Intelligent Decision Making Systems**
- **Better Standards, Evaluation**
- **Ensure decreased costs**

# Medical aspects

---

## 1. Congestive Heart Failure

Phone  $\equiv$  conventional care.

## 2. Early Stroke management

## 3. Tele Mental Health

TM  $\equiv$  Face to face (need to convince more of this & for some types of schizophrenia TM is better)

## 4. Home Care – More Communication, Information Access/Transfer (eg GPs-Specialists); Patient Self Monitoring, Self Management. Continuous monitoring & send data to HCWs (eg initially ECG, Postprandial Plasma glucose, patient's state). Costs critical.

# Smart Fabrics

---

- **Fabrics to → Power Production & Storage, Communication of data.  
(On threshold of prototyping & testing)**
- **Already crude Biomonitors with TM sensors are wearable**

# Carl J Brandt

---

- Internet Medicine

# Internet Medicine

---

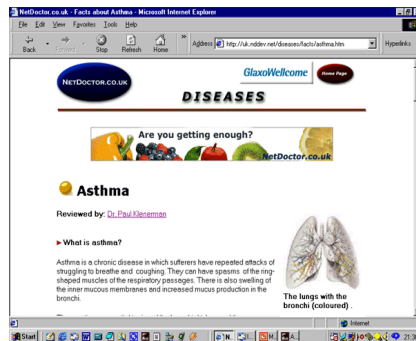
- Internet medicine:
  - Content – Health information
  - Social networks in medicine
  - Electronic patient journals (EPJ)
  - Email-consultations
- What do we know and what do we think?
  - Collaborating with traditional medicine
  - Communicating over distance
  - Is Internet an under valued asset?

# Value and personalization

Value



**Content:**  
Read and understand



**Communities:**  
Virtual interaction



**Care:**  
One to one



**Personalisation**



# Internet Medicine

---

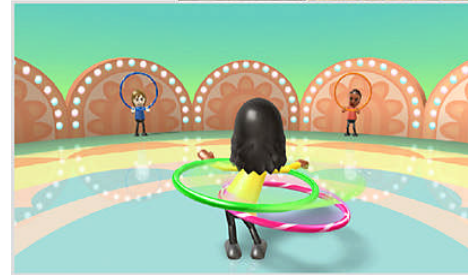
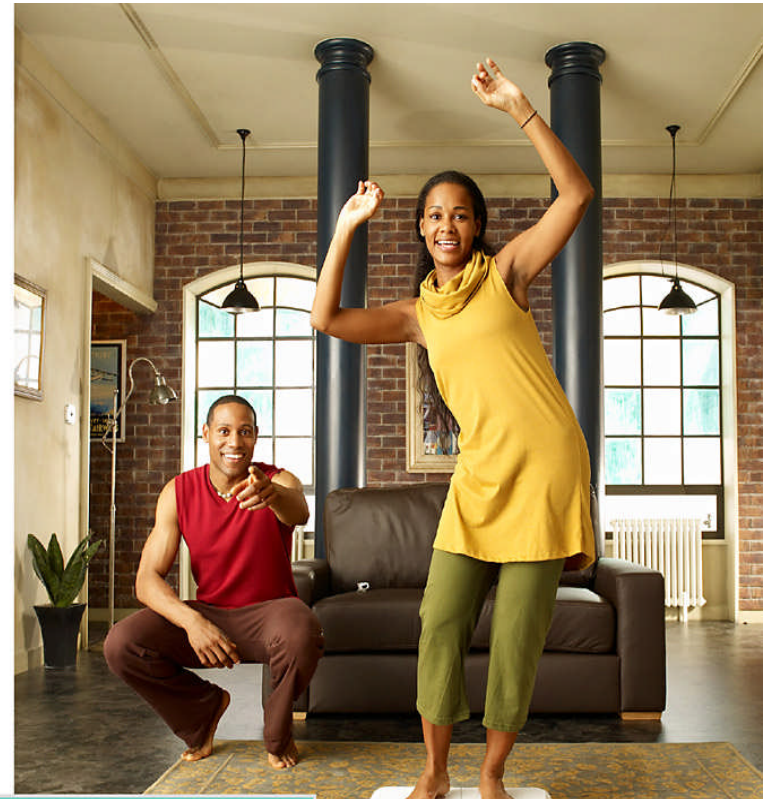
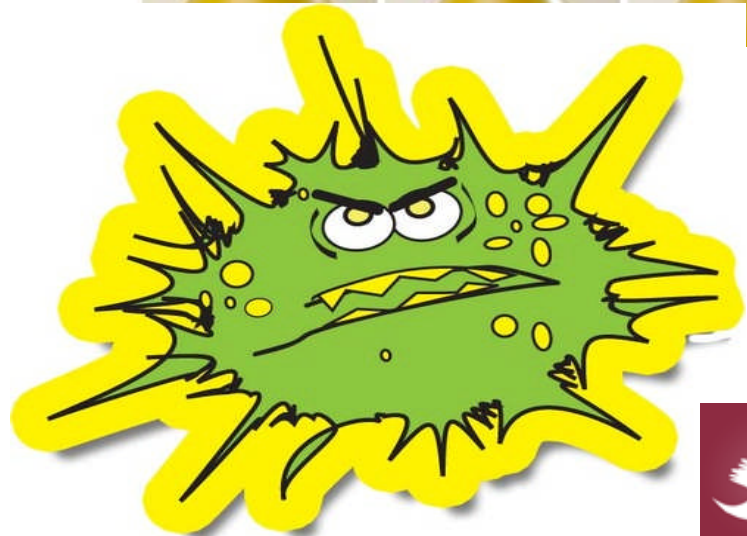
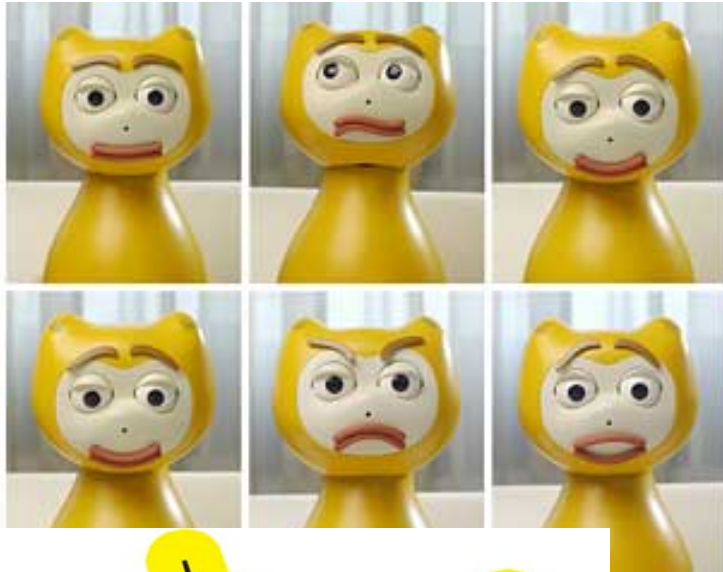
- Content – Health information
  - Can be compared to traditional leaflets
  - Value if the right information arrives at the right time
  - Easy to make quality control and easy to update
- Social networks – do they have a roll?
  - Much discussion of pros and cons
  - When put in the right setting for the right people it does play a roll
- EPJ
  - Effective tool for many
  - Data exchange
- Email consultations
  - Professional online treatment
  - Being independent of time and place
  - Giving advice and making prescriptions

## Internet Medicine

---

- Collaborating with traditional medicine
  - Concerns for use of new technology
  - Difficult to conduct quality studies when technology platforms change every month
  - How can we make internet work for all groups of society?
- Communicating over distance
- Information clouds with health information – learn from the financial world
- How can we make the different systems able to communicate with each other?
- Is Internet an undervalued asset?
- Save time
- Make specific requests
- Availability
- We have only seen the top of the iceberg

# Statement 2: Simple, smart technology for enjoyable health care



# Information therapy



Personal Home Screening Wann (in welchem Moment) muss ich bei einem Patienten einen Abstrich...

Stelle eine Frage:

Suchen

Wann (in welchem Moment) soll ich bei einem Patienten einen Abstrich nehmen?

Antwort

Am besten eine Woche vor der stationären Aufnahme. Ist das nicht möglich, dann innerhalb der ersten 48 Stunden nach der Aufnahme.

Video



Informationen über:

- MRSA Allgemein
- Screening
- Schutzmaßnahmen
- Desinfektion kontaminierter Materialien
- Aufnahme
- Verlegung und Transport
- Entlassung
- Sanierung
- Selbst MRSA-Träger
- Kontakt bei Fragen rundum MRSA

Meist gestellte Fragen

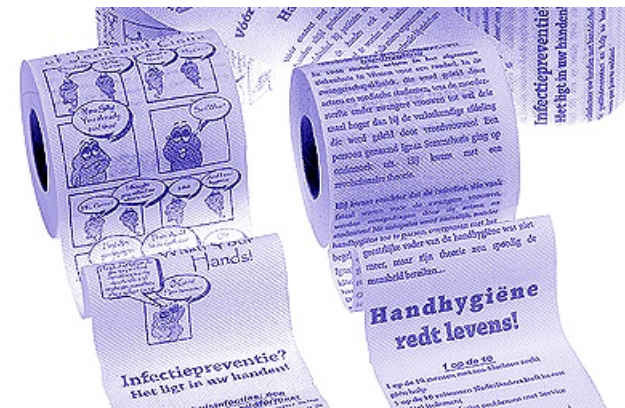
- In welcher Reihenfolge muss ich Schutzkleidung an- und ausziehen beim Betreten des MRSA Patientenzimmers?
- Kann man MRSA behandeln?
- Ich möchte den MRSA-Patienten sanieren. Wie gehe ich vor?

Mehr Fragen »

Gereed

Internet | Beveiligde modus: ingeschakeld

100%



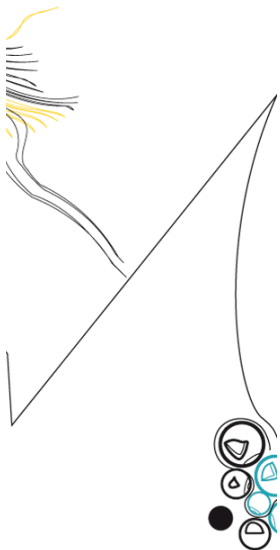


## Healthcare supported by *technology*

---

**How technology can be developed and used in a effective and efficient way?**

**How will technology may be accepted by patients, caregivers?**



### 3. ICT is important but does not stand alone




---

- **How to empower patients and professionals (proactive collaboration)?**
- **How to lower costs? (reduce the number of visits; just in time care instead of damage control; to deliver cheaper alternatives).**
- **How to identify the best fit of services for each population/individual? (to give patients more individual choices for health and wellbeing)**

### 3. Integration of services for monitoring, education, communication, logistics, personalized and tailored

U bent ingelogd als C. J. Parker  
Uitloggen of opnieuw aanmelden

Zoeken..

 Uw profiel samenstellen  Persoonlijke diensten  Publieke diensten

## Welkom op uw persoonlijke patientportaal!

### Mijn gegevens

#### Huidige medicatie

**Paracetamol tablet 500mg, 10st, 1D1T**

Einddatum 21-06-2009

**lormetazepam, tablet 2mg, 20ST, 1D1T, VN**

Einddatum 21-06-2009

[Al mijn gegevens bekijken](#) ➔

### Mijn diabetes

Hier kunt u onder andere:

- Uw diabetes behandeling inzien
- Uw behandeldoelen vinden
- Uw voortgang bijhouden
- Uw planning bekijken
- Uw meetwaarden invullen

[Mijn diabetes diensten inzien](#) ➔

### Nieuws

04-04-09 **Wetenschappers en allergiepatiënten werken samen**

04-04-09 **Genen ontdekt die rol spelen bij nierziekten**

04-04-09 **Virusregen bij hoesten en niezen**

04-04-09 **Aantal diabetici stijgt flink**

[Nieuws archief inzien](#) ➔

### Doen

[Herhaalrecept aanvragen](#) ➔

[E-consult](#) ➔

[Afspraak maken](#) ➔

[Diensten aan mijn homepage toevoegen](#) ➔

[Gebruikersinstellingen wijzigen](#) ➔

### Mijn zorgverleners

Klik op het plusje om de adres- en contact gegevens van uw zorgverleners te tonen.

- + Ziekenhuizen omg. Deventer
- + Uw huisarts
- + Uw tandarts
- + Uw orthodontist
- + Uw diëtist

### Nieuw in mijn portaal

Klik op het plusje om een nieuwe dienst toe te voegen aan uw persoonlijke portaal.

- + Ziekenhuizen omg. Deventer
- + Uw huisarts

**Statements theme II. “design and implementation”**  
***realizing sustainable healthcare***

---

- 4. e-Disease management models for a better balance between self-care and professional care**
- 5. Participative design for better and innovative healthcare**
- 6. A holistic framework for high quality eHealth, to bridge the gap between technology and medicine**
- 7. eHealthwiki for high quality interventions**
- 8. Business modelling to make it real**

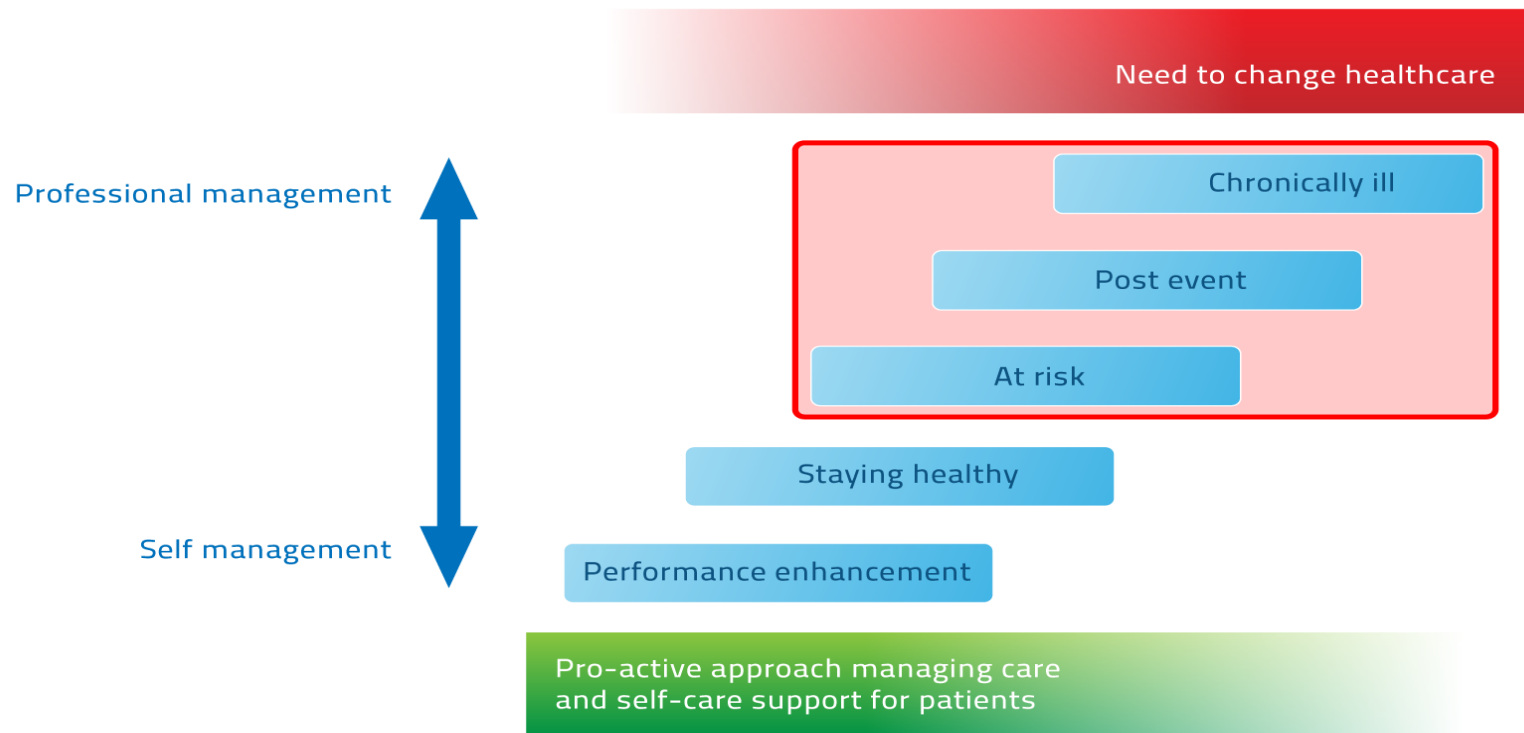


## 4) Technology for a better balance between self-care and professional care

---

### eDiseasemanagement for Sustainable Healthcare

---



## 5. Participatory design to change traditional Healthcare Service

The screenshot shows a YouTube video player with a presentation slide. The slide has a dark blue background with a grid pattern and a glowing blue heart shape. The text on the slide reads: "e-Patient Revolution" at the top, followed by five stars. Below that, it says "Patients are:" followed by a list of attributes: "engaged", "enabled", "educated", "empowered", "expert", "electronic", and "equipped". The video player interface includes a progress bar at the bottom showing 1:05 / 2:06, a volume icon, and a "YouTube" logo.

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The screenshot shows a YouTube video player with a presentation slide. The slide has a dark blue background with a grid pattern and a glowing blue heart shape. The text on the slide reads: "e-Patient Revolution" at the top, followed by five stars. Below that, it says "e-Patients are SHARING" in large letters, followed by "57% are eager to share their new health or medical knowledge". The video player interface includes a progress bar at the bottom showing 1:25 / 2:06, a volume icon, and a "YouTube" logo.

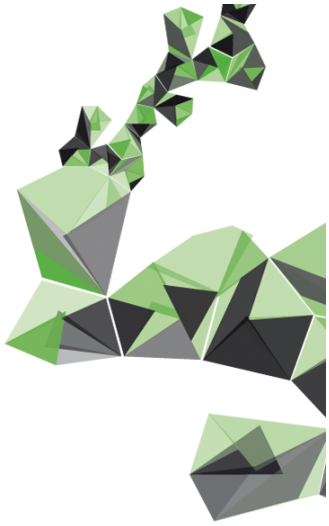


## Feedback: “fascinate, motivate and bind”

---

- Feedback & advice to achieve their own goals
  - Personal or automatic
  - Reminders, alerts
  - Competition (serious gaming)
  - Emotions
  - Virtual rewards; unpredictable reinforcements etc
- Motivation via mobile technology
  - Opportunity **to modify** (iGoogle/iPhone)
  - Offering information at opportune moments
  - Convenience (easy to use); **mobile marriage**
  - **Rural areas**





## 6. Holistic models for ICT-based healthcare

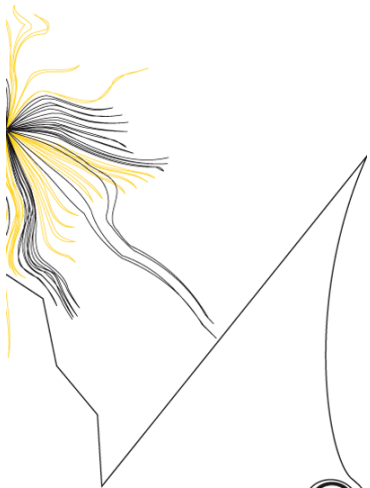
---

**Health is not merely a matter of the body anymore.**

**Health increasingly needs a holistic approach, e.g. chronic care models;**

**Involving mental health, physical health, caring relationships, as well as daily habits and behavioural patterns; and**

**Environmental issues that influence implementation**





## Interventions based on a multidisciplinary approach

---

### **Framework**

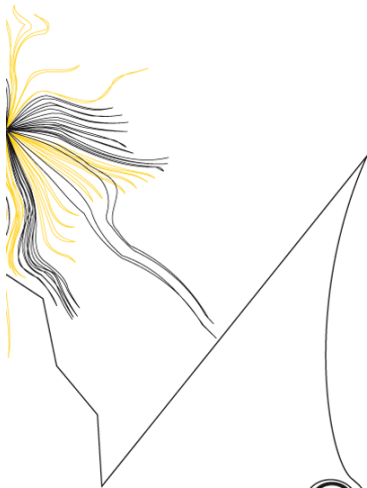
- Holistic models (Chronic care); SES, culture and habits

### **Design**

- Usability theories (smart, simple, affective)
- Information and communication theories

### **Implementation**

- Health behavioural theories (self-control, adherence)
- Innovation models (adoption, implementation of technology in healthcare)
- Business modelling eHealth (implementation plan)



## 7 eHealthWiki. A collaborative tool for high quality eHealth interventions

---

; = = \ ] [ \_ {  
/making/the/  
eHealth/  
connection  
/" #, ( ) \* = \ [

*Take-up of eHealth is rather low  
Need for a guide for developing eHealth*

# eHealthWiki. How?

---

## **Step 1. Design principles**

Analyze needs & requirements

Produce high-quality solutions

Specify implementation strategy

Evaluation throughout the design process (formative and summative)

## **Step 2. Research**

Practice-based research (case studies)

Theory-based research (frameworks)

Combination (framework of frameworks)

# Framework for innovative and sustainable health care supported by technology

What type of technology? How does it work? How implemented? What effects on Health care?

## 1. design of technology (system)⇒

criteria:

### Determining the target group

- who is suitable for the technology?
- access to PC/Internet
- PC/Internet skills
- end-user needs (assessment)
- are the intervention goals geared to user needs?
- attitude
- expectations & demands (e.g., response time)
- equitability & availability (digital divide)

### User-friendliness

The degree to which the user assumes the system

- is functional and free of discomfort
- ease of access/log-in procedure
- clearness of navigation structures
- efficacy of search functionalities
- simplicity of technology
- presentation of information
- absence of technical errors
- provision of feedback mechanisms
- provision of self-care mechanisms
- provision of links

### Design aesthetics

- visual aspects: picture quality
- lay out
- text size
- motivating/entertaining elements

### Safety

- privacy/confidentiality assurance
- technical security (encryption, au

## 2. information, communication (

criteria:

### quality of communication

- timely responses?
- interaction degree: hoe vaak wordt over en weer gemaaid? lengte berichten, response-time
- problem-solving vermogen: in hoeverre kan de vraag via e-consult beantwoord worden (vraag geschikt voor e-consult?)
- voldoende achtergrondinfo om vraag te kunnen beantwoorden? (hoe vaak wordt alsnog verwezen naar F2F contact?)
- collaborative goalsetting?

### quality of information/advice

- useful advice
- reliable advice
- personalized advice (empathy)
- comprehensible advice
- completeness advice

## 3. implementation of technology ⇒

criteria:

### Ease of incorporation

- time investment of incorporation
- transparency of directions/standards (conditions for use of technology)
- accountability/attribution of quality control (role of government/health insurance companies)
- financing: costs and reimbursement of technology
- proper marketing
- proper training of end-users (geared to end-users)
- transparency of user guidelines

## 4. Use of the system

- substitution of responsibilities?
- reduction of costs?

### Patient-caregiver interaction:

- increased continuity of care?
- (more continuous feedback)
- increased decision support?
- (juiste zorgweg; urgentie, keuze arts: de mate waarin een gebruiker veronderstelt dat gebruik van het systeem zijn performance zal verbeteren)
- more efficient & effective communication?
- better patient-caregiver relationship?

### Health outcomes (behavioural & clinical):

- improved clinical values (e.g., dietary values, HbA1c, blood pressure)
- improved quality of life (social functioning, general or mental health, well-being and satisfaction with care)
- improved compliance with advice





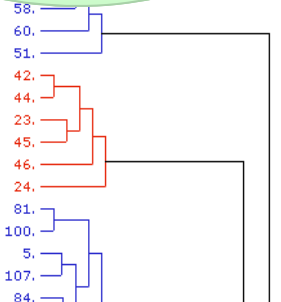
# eHealth Toolkit for robust methods

Needs assessments, mental models: survey, interview Card-Sort, prototyping

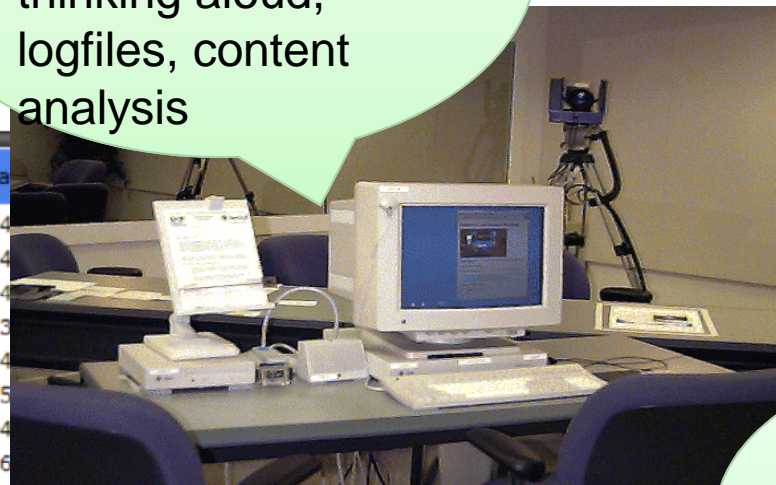
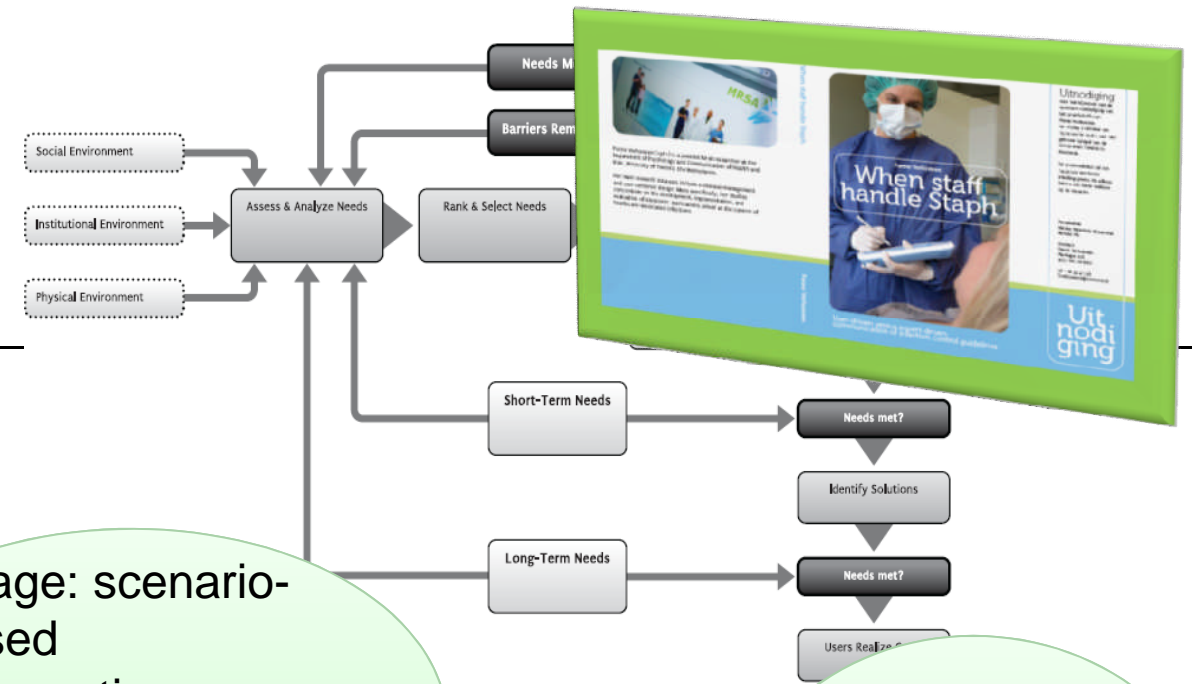
Usage: scenario-based observations, thinking aloud, logfiles, content analysis

Adoption: narratives, focus groups, business modelling

Effects: reviews, interviews, surveys, RCTs



Maand	bezoekers	bezoeken	Pa		
Jan 2009	7034	8602	4		
Feb 2009	7216	8916	4		
Mrt 2009	8338	10407	4		
Apr 2009	6864	8584	3		
Mei 2009	9248	11172	4		
Jun 2009	10834	13170	5		
Jul 2009	10908	13450	4		
Aug 2009	13457	16313	6		
<b>Sep 2009</b>	1311	1453	6433	33133	666.55 MB
Okt 2009	0	0	0	0	0
Nov 2009	0	0	0	0	0
Dec 2009	0	0	0	0	0
<b>Totaal</b>	<b>75210</b>	<b>92067</b>	<b>386350</b>	<b>2112124</b>	<b>34.63 GB</b>

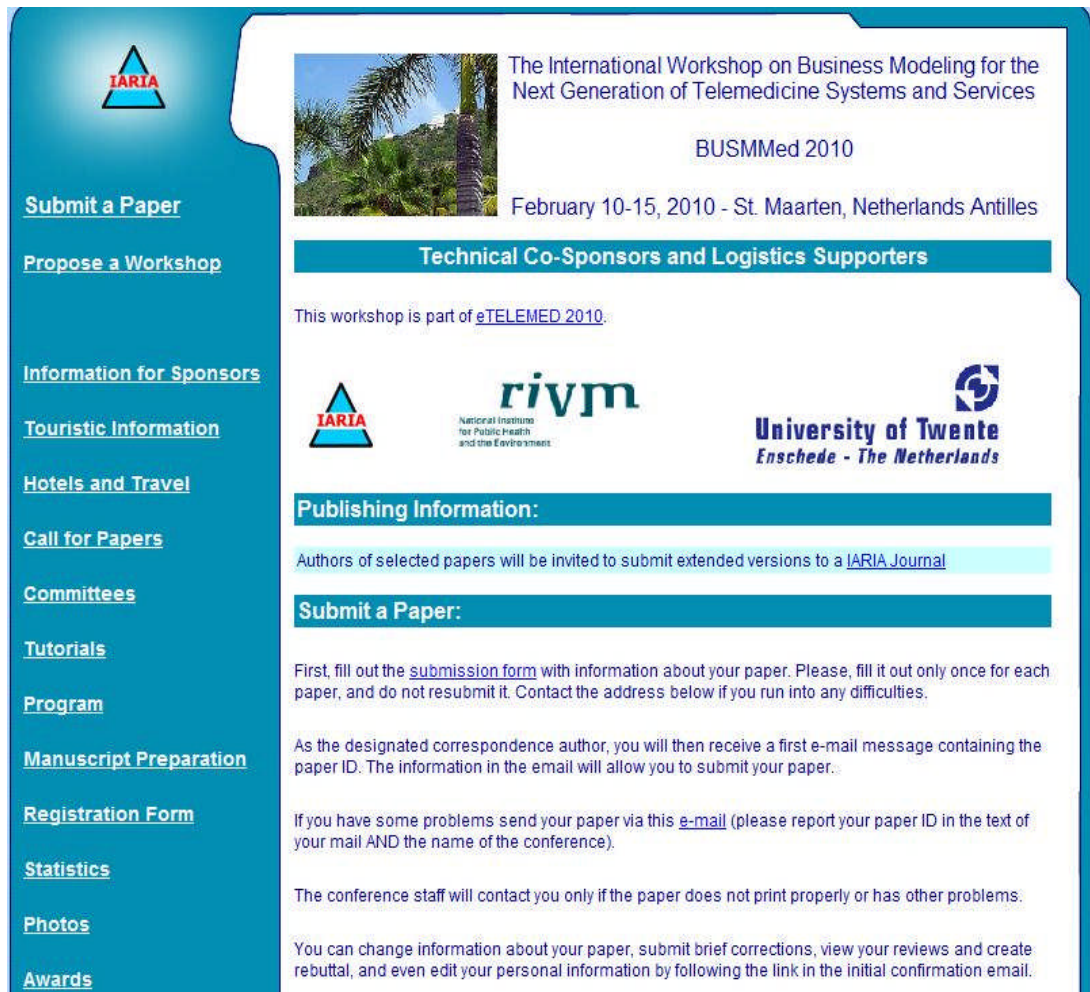


## **8. Business modelling a collaborative process of creating value**

---

- Payers, patients, providers participate in design, implementation**
- Process to build customer relationships, to realise coproduction of services**
- Clients become value co-creators**
- Next generation of technology mediates value co-creation**

# Adequate business models for sustainable eTelemed interventions



The screenshot shows the IARIA website for the BUSMMed 2010 workshop. The left sidebar contains navigation links: Submit a Paper, Propose a Workshop, Information for Sponsors, Touristic Information, Hotels and Travel, Call for Papers, Committees, Tutorials, Program, Manuscript Preparation, Registration Form, Statistics, Photos, and Awards. The main content area features a header with the IARIA logo, a photograph of palm trees, and the workshop title: 'The International Workshop on Business Modeling for the Next Generation of Telemedicine Systems and Services'. Below this, it specifies 'BUSMMed 2010' and the dates 'February 10-15, 2010 - St. Maarten, Netherlands Antilles'. A blue bar lists 'Technical Co-Sponsors and Logistics Supporters', including IARIA, RIVM (National Institute for Public Health and the Environment), and the University of Twente (Enschede - The Netherlands). A 'Publishing Information' section states that authors of selected papers will be invited to submit extended versions to the IARIA Journal. A 'Submit a Paper' section provides instructions: fill out the submission form once per paper, do not resubmit, and contact the address if difficulties arise. It also notes that the designated correspondence author will receive a first e-mail with the paper ID and that authors should report problems via e-mail, including the paper ID and their name. Finally, it mentions that the conference staff will contact authors if the paper does not print properly or has other problems, and that authors can change information, submit corrections, view reviews, and create rebuttals by following a link in the initial confirmation email.

## BUSMMED Panel

## Digital Society Trends: How to use Business Modeling for Design and Implementation of Healthcare Technology?

Friday 12 Feb 2010

UNIVERSITY OF TWENTE.

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Thank you  
Merci beaucoup  
Baaie dankie

# ”E-Dieticians” in General Practice

An implementation study

By: Carl J. Brandt, GP, Stenstrup Lægehus;  
Dorte Glintborg, PhD, Dept. of Endocrinology, Odense  
University Hospital,  
Cecilia Arendal, Dietician, Nyborg and  
Søren Toubro, PhD, Reduce

supported by  
the quality and postgraduate education board  
in region South Denmark and PraksisCare.dk

## Background

- Obesity is according to WHO one of the greatest health challenges of our time.
- The aim of the pilot project was to research the weight loss efficacy and the cost of individual dietetic internet-based consultation in a Danish medical centre in combination with an internet community.

## The players



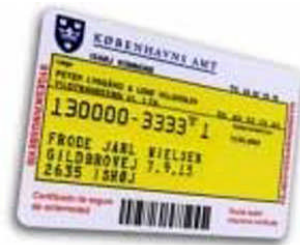
General practice



PraxisCare



Dietician



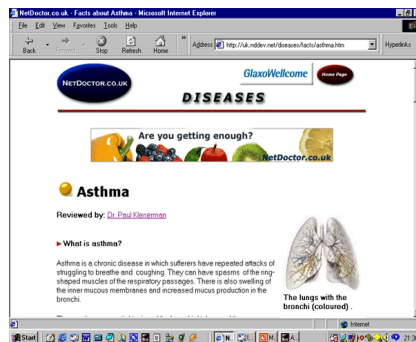
Public HMO

# Value and personalisation

Value



**Content:**  
Read and understand



**Communities:**  
Virtual interaction



**Care and services:**  
One to one



**Personalisation**

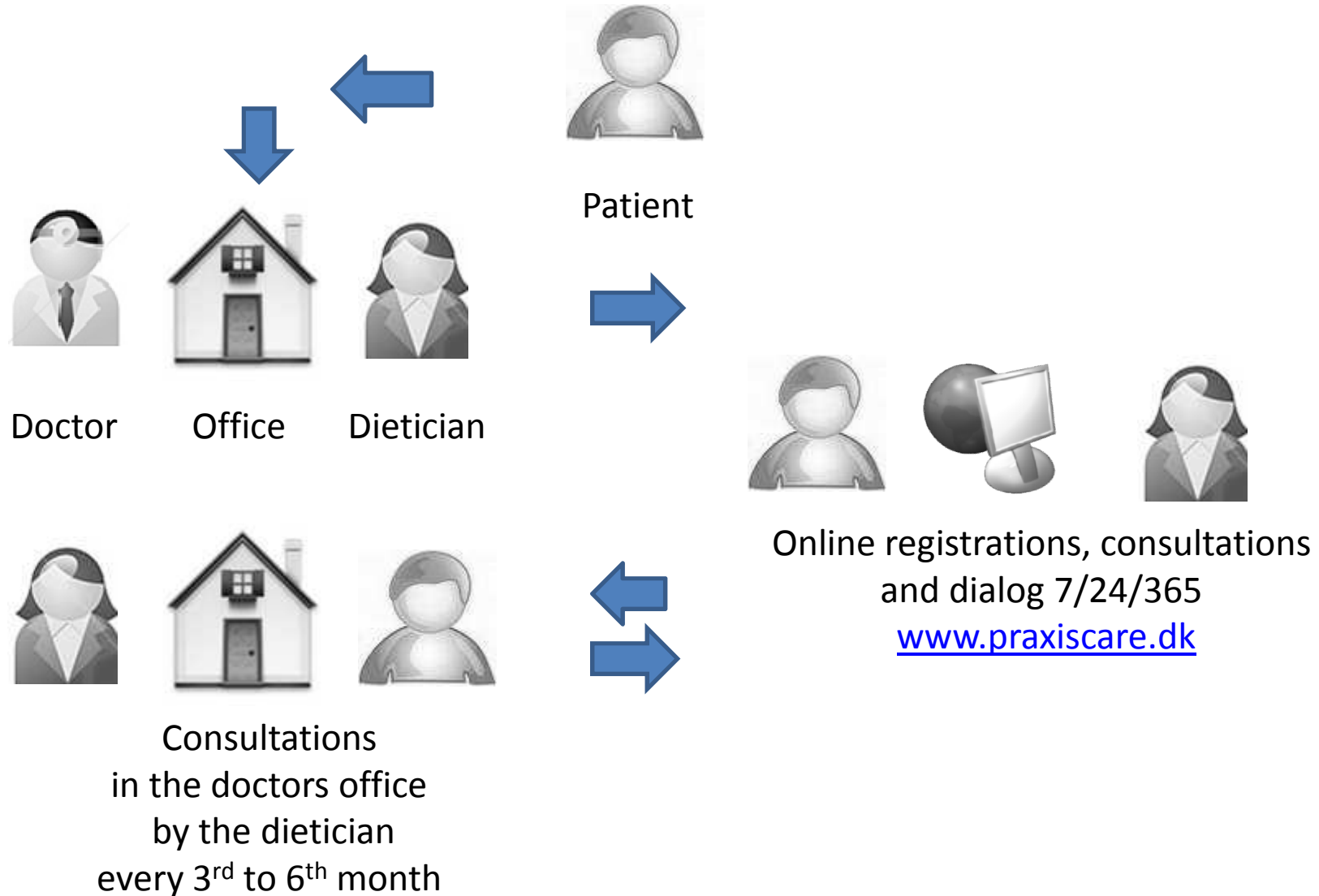


# Who is behind PraksisCare?

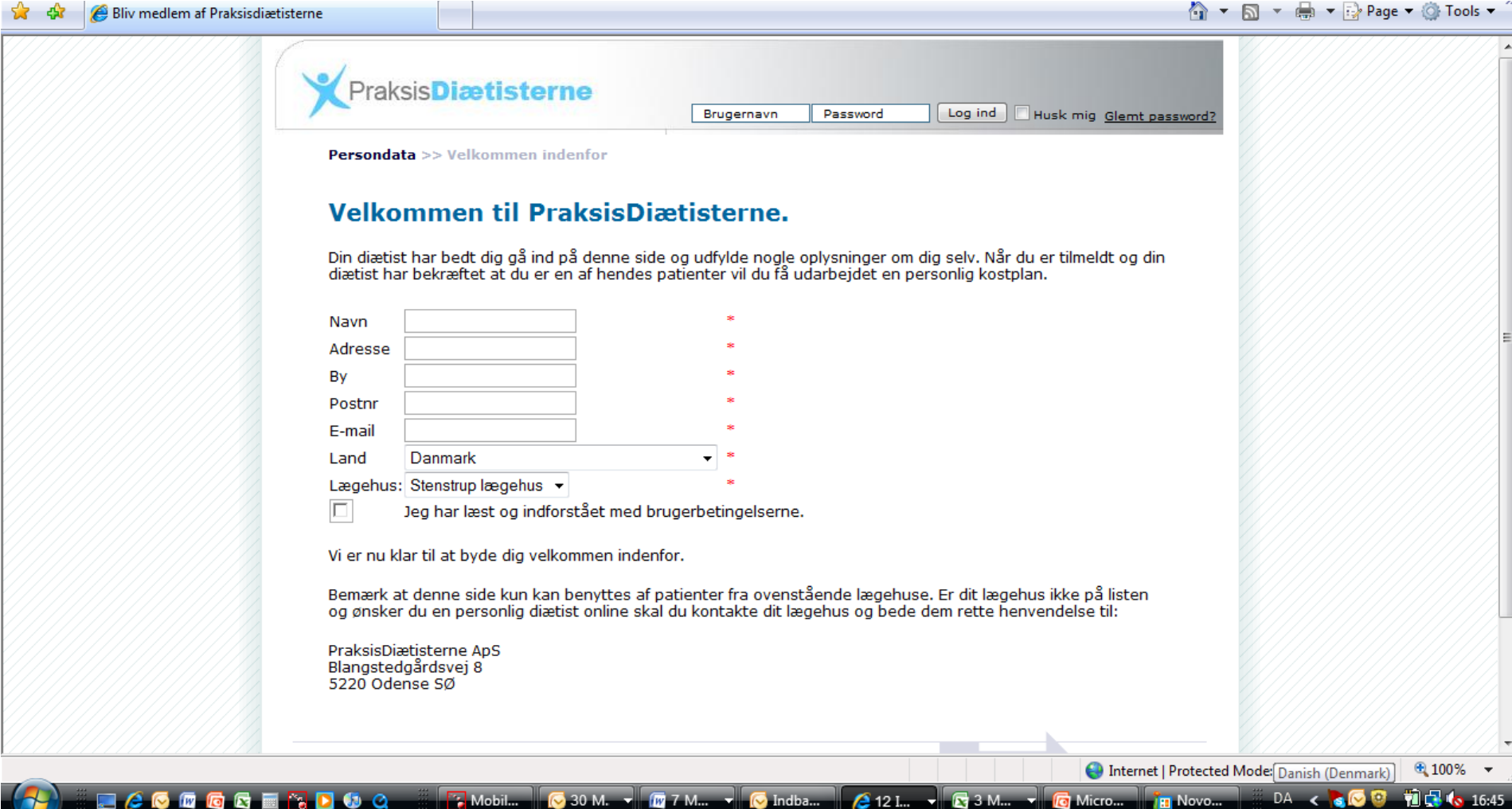
125 of the best Dietitians in Denmark



# Flow chart for the patient



## How do the patient get started



The screenshot shows a web browser window with the URL "Bliv medlem af Praksisdiætisterne". The page header features the "PraksisDiætisterne" logo and a login section with fields for "Brugernavn" and "Password", a "Log ind" button, and links for "Husk mig" and "Glemt password?".

The main content area is titled "Persondata >> Velkommen indenfor" and "Velkommen til PraksisDiætisterne." Below this, a message states: "Din diætist har bedt dig gå ind på denne side og udfylde nogle oplysninger om dig selv. Når du er tilmeldt og din diætist har bekræftet at du er en af hendes patienter vil du få udarbejdet en personlig kostplan."

The registration form includes the following fields:

- Navn:
- Adresse:
- By:
- Postnr:
- E-mail:
- Land:
- Lægehus:

There are red asterisks to the right of each input field, indicating required information. A checkbox is present below the form with the text "Jeg har læst og indforstået med brugerbetingelserne."

Below the form, the text reads: "Vi er nu klar til at byde dig velkommen indenfor." and "Bemærk at denne side kun kan benyttes af patienter fra ovenstående lægehuse. Er dit lægehus ikke på listen og ønsker du en personlig diætist online skal du kontakte dit lægehus og bede dem rette henvendelse til:"

At the bottom of the page, the address is listed: "PraksisDiætisterne ApS, Blangstedgårdsvej 8, 5220 Odense SØ".

The browser's taskbar at the bottom shows several open applications and the system clock at 16:45.


# Online registration of personal health data by the patient



Du er logget på som:  **bekaja**

[Se profil](#) | [Ret profil](#) | [Medlemsstatus](#)

[LOG UD](#)

**Forsiden** 

**Mit vægttab**

**Kurver**

- Indbakke
- Råd fra vejleder
- Dagbogen
- Tast Mad
- Min Kostplan
- Tast Motion
- Min Motionplan
- Mål & Delmål
- Min kagebog
- Min Hjemmeside

**Mit hold**

- Medlemmerne
- Holdets Kurver
- Debat og Spørgsmål
- Holddagbøger
- Holdbeskrivelser

**Mine venner**

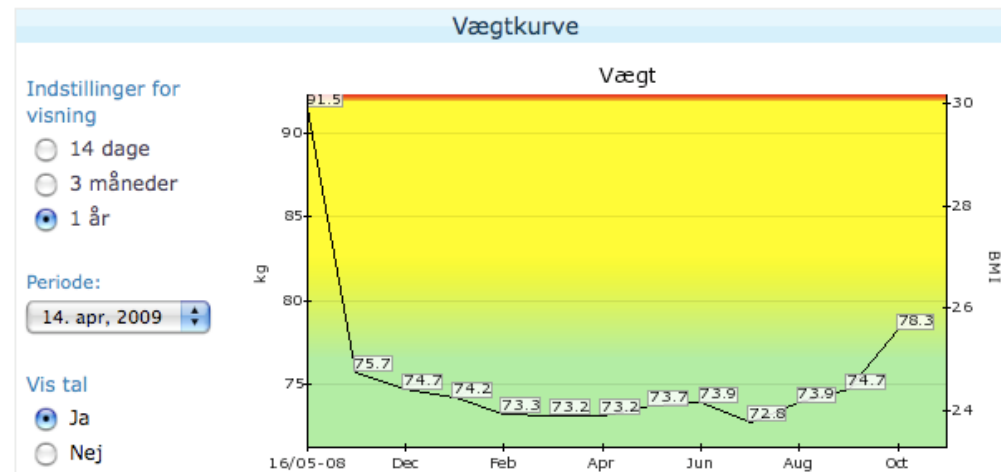
- Venneliste
- Venners Kurver
- Vennedagbøger


## Kurver

Her kan du følge din vægtkurve dag for dag. Du skal indtaste din vægt i feltet til højre så ofte som muligt: Helst hver dag, mindst en gang om ugen.

Vej dig om morgenen inden morgenmad men efter morgentoilette - og uden tøj. Det er vigtigt, at du bruger den samme vægt hver dag.

**Bemærk** at der skal mere end en indtastning til at få en kurve frem. 3-månederskurven udregner gennemsnittet af hver uges indtastninger og årskurven udregner gennemsnittet af hver måned.



**Se din vægtkurve** 

Vægttab i alt **3 0 1 3 9 1**

**Mine Målinger**

**Vægt**

91,5    85    78,8

**12,7**    **195%**

29,9    27,8    **25,7**

**Seneste måling:**

78,8 kg    fre 16/10

**Taljemål**

**Seneste måling:**

101,5    man 14/09

# Online consultations

**Mine venner**

- Venneliste
- Venners Kurver
- Vennedagbøger
- Søg Venner

**Biblioteket**

- Startinstruktion
- Opskrifter
- Artikler

**På tværs**

- Brevkassen
- Gallerier
- Nyheder
- Slanketips
- Succeshistorier
- Debat på tværs**
- Chat (0)
- Løbeprogrammer
- Rabatklub
- Konkurrence
- Ugens bruger
- Rubiner
- Diamanter
- Smaragder
- Top-20 Vægt
- Top-20 Dagbog
- Kongekroner
- I mål

**Mit medlemskab**

- Mit Medlemskab
- Min Profil

Udskriv

## Diætist råd

Kære bekaja

Rigtigt glædelig jul og godt nytår

Jeg håber sådan de sidste 8 uger bliver rare og gode for jeres lille glade familie....

### Endnu lidt inspiration

[Havregrynsboller](#) som er gode til et mellemmåltid. Har du mon prøvet når du "smører" en bolle/sandwich at bruge en let smøreost - fx Philadelphia light eller Buko friskost - let. Det giver en fin frisk smag og gør at din bolle ikke bliver tør. Tillige giver det et lille tilskud af protein som dit vægttab har godt af.

Og så måske også et forslag til weekenden:

[Ovnkartofler i fad -](#)

[Bøffer med ananas](#)

Mange venlige julehilsner fra Cecilia 

### Tidligere råd fra vejlederen

- ▶ 14/01-10 22:52:09 [Diætist råd](#)
- ▶ 19/12-09 13:21:38 [Diætist råd](#)
- ▶ 07/12-09 20:21:51 [Diætist råd](#)
- ▶ 20/11-09 11:01:37 [Diætist råd](#)

Udskriv

**Seneste måling:**  
101,5 man 14/09

**Hoftemål**

tir 09/02  
cm **Gem**

**Seneste måling:**  
103 man 14/09

**Vis flere**

### Min vejleder

- ▶ 14. jan, 10 [Diætist råd](#)
- ▶ 19. dec, 09 [Diætist råd](#)
- ▶ 7. dec, 09 [Diætist råd](#)
- ▶ 30. nov, 09 [Diætist råd](#)
- ▶ 16. nov, 09 [Motionsråd](#)

[» Gå til din vejleder](#)

### Venneliste

- 20 Birte1611
- 30 annejunge
- conniemormor
- 15 alice-j
- 10 frushansen
- 20 sasmo1
- 10 Jannie

# Online community creating a social network

6


**Resultat**

Vægttab i alt  
301391 kilo

**Login**  
Du er logget på som

👍👍👍 10 beaja

**Log ud**  
[Se profil](#) | [Ret profil](#)  
[Medlemsstatus](#)




Kristoffer 4 dage gammel...

Kommenter dette indlæg

**Kommentarer**


Marker alle

---


Kæmpe tillykke fra Mig...  
 Sikke en køn dreng! :O)

👍👍👍 20  
 Birte1611  
 07-02-10 23:43  
[Send besked](#)  
[Dagbog](#)


Knuser, Birte

Hej søde!  
 STORT STORT TILLYKKE med jeres lille ny prins :-)  
 Hvor ser han fin og dejlig ud, og dejligt at det gik hurtigt med at få ham!  
 Selvfølgelig skal Benjamin lige vænne sig til "konkurrenten", men det gør han garanteret hurtigt.  
 Rigtig god weekend til jer alle 4 :-))  
 Knus fra Jane...

👍👍👍 15 👑 jafran  
 06-02-10 09:49  
[Send besked](#)  
[Dagbog](#)

ET STORT TILLYKKE MED JERES LILLE KRISTOFFER  
 Nogle rigtig gode billeder ,og en stolt storebror

👍 5 Linsen54  
 05-02-10 16:16  
[Send besked](#)  
[Dagbog](#)

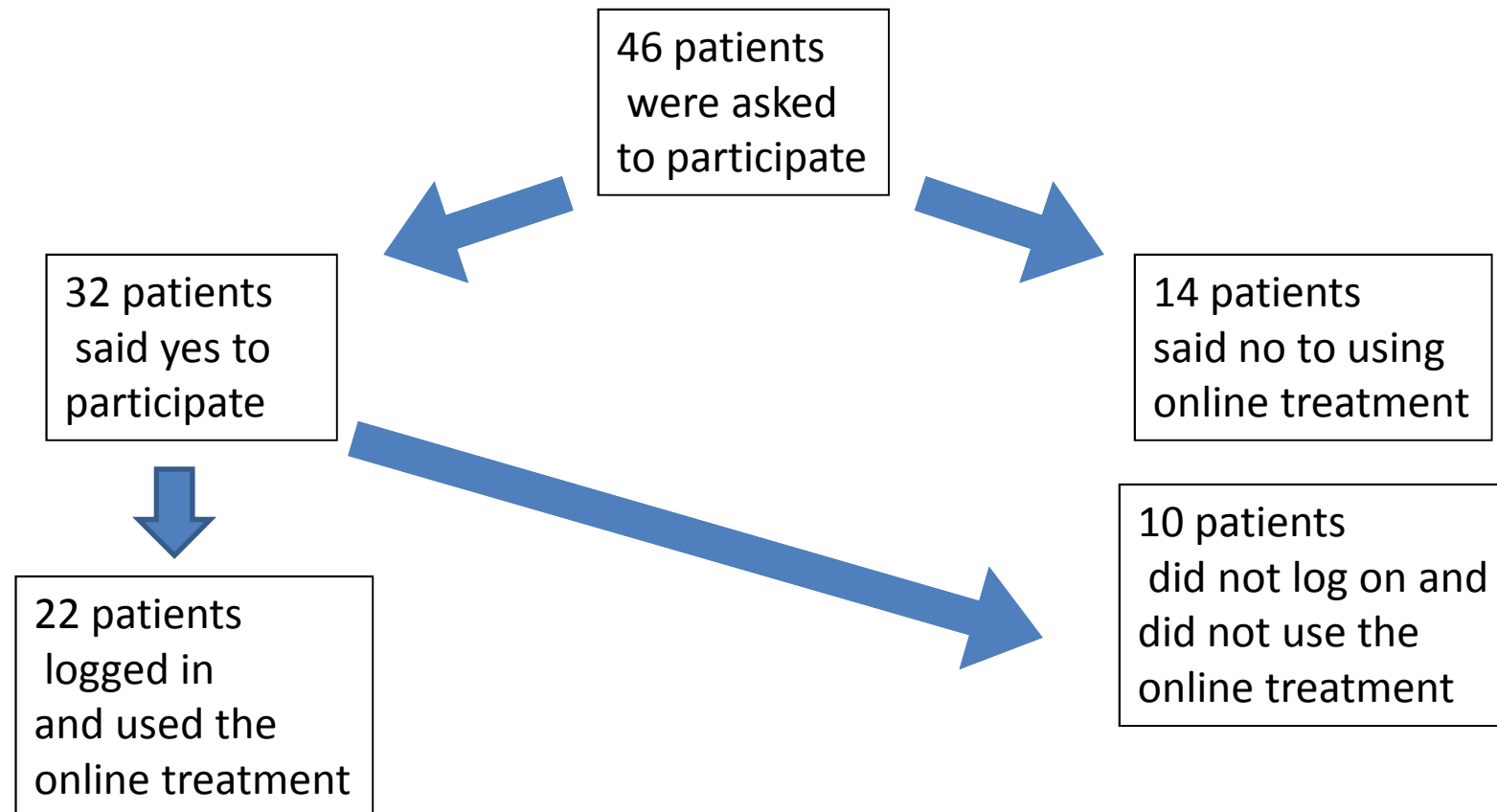
 KH Elin

Tillykke med ham-han ser skøn ud. 🙄

👍 5 Betina69  
 05-02-10 15:19  
[Send besked](#)  
[Dagbog](#)

Hilsen fra Betina

## Patient flow



# Results

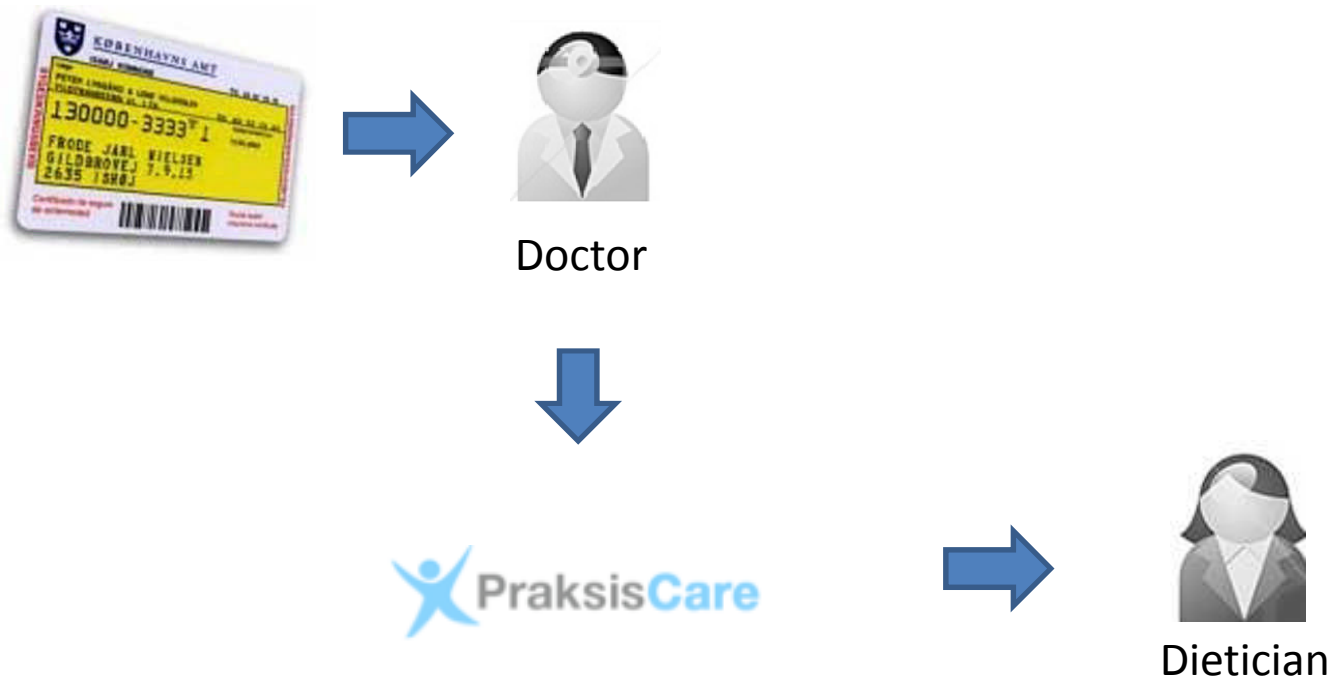
<b>Sex</b>	<b>Age (years)</b>	<b>BMI</b>	<b>Treatment Period (Days)</b>	<b>E-mail- consultations (#)</b>	<b>Treatment cost (DKK)</b>	<b>Weight loss (Kg)</b>
M	55	38,3	162	26	1925	2,5
F	38	29,8	138	22	1515	9,7
M	43	39,6	137	10	708	3,3
F	44	36,6	172	22	1726	15,3
F	26	26,5	135	20	1416	6,2
F	39	34,7	105	26	1925	7,4
F	36	31,5	149	22	1515	16,3
F	51	31,6	146	17	1267	2,5
F	37	37,4	108	22	1515	9,9
M	63	43,4	135	21	1254	-1,7
F	61	42,9	62	5	460	0,7
F	40	46,6	81	6	509	8,8
F	55	34,5	121	22	1304	8,9
F	42	42,7	107	19	1366	7,3
F	46	31,0	136	14	907	13,1
F	33	44,1	105	17	1056	19,2
F	40	36,8	130	14	907	6,4
F	53	32,5	84	15	956	3,5
M	27	37,0	95	17	1056	1,4
M	30	37,0	119	14	907	3,8
F	45	33,9	42	14	695	5
F	34	31,9	68	11	758	3,8



## Results

	Females(n=17)		Males(n=5)	
Age(years)	40 (37-49)		43 (29-59)	
Period (days)	108 (82-137)		135 (107-150)	
E-mailcons.	17 (14-21)		17 (12-23)	
	Before	After	Before	After
Weight (kg)	94 (89-115)	91 (77-106)**	113 (103-121)	109 (100 -121)*
	34,6 (31,6-			
BMI (kg/m <sup>2</sup> )	40,0)	31,9 (28,5-35,9)**	38,3 (37,0-41,5)	37,4 (36,1-41,2)
Waist (cm)	105 (91-110)	96 (85-104)*	120 (118-130)	117 (114-130)
Hip (cm)	121 (111-131)	110 (101-116)*	114 (112-115)	114 (113-115)
	0,86 (0,82-			
WHR	0,93)	0,86 (0,82-0,93)	1,10 (1,07-1,13)	1,09 (1,04-1,13)
Total cholesterol	5,2 (4,6-5,5)	5,0 (4,2-5,6)	5,9 (5,3-6,1)	5,3 (3,8-5,8)
LDL (mmol/l)	2,9 (2,6-3,6)	3,0 (2,5-3,3)	2,8 (2,8-4,0)	3,3 (3,1-4,0)
HDL (mmol/l)	1,2 (1,1-1,4)	1,3 (1,0-1,4)	0,9 (0,7-1,2)	1,0 (0,9-1,3)
TG (mmol/l)	1,4 (1,1-2,3)	1,2 (0,8-1,6)	4,3? (2,1-6,1)	1,9 (1,1 – 3,5)
HbA1c (%)	5,5 (5,2-5,6)	5,3 (5,2-5,6)	7,4 (5,4-10,2)	6,6 (5,1-9,0)

## Remuneration from the public HMO via the GP and Praksiscare.dk



## Discussion

- Implementing internet treatment needs local adjustment and handling with respect to the local value chain and barriers.
- It is of great importance that systems are well integrated into the local electronic patient journal and does not result in extra work for the GPs and their nurses
- The major barriers we met seems to be the doctors reluctance to new technology and the patients failure to use the IT platform of today

## Discussion

- Even though the numbers are small a weight loss of 6,3 kg over a period of 4 months is comparable with other conventional treatments
- The lack of drop outs was remarkable.
- The combination of professional face to face contact with online in time health registration, consultations and social communities is new
- We don't know who benefits from this as the numbers are too small

## Conclusion

- The combination of professional face to face contact with online in time health registration, consultations and social communities might be a cost effective way to produce significant weight loss among patients with obesity
- With respect to the value chain e-advice combined with online communities can be implemented across the country in Denmark and other countries followed by long term studies including control groups

## Reference that could be of interest

J Med Internet Res. 2009 Sep 30;11(3):e40.

Systematic review on Internet Support Groups (ISGs) and depression (1): Do ISGs reduce depressive symptoms?

Griffiths KM, Callear AL, Banfield M.

Centre for Mental Health Research, The Australian National University, Canberra, Australia. [kathy.griffiths@anu.edu.au](mailto:kathy.griffiths@anu.edu.au)

- Overall, studies of breast cancer ISGs were more likely to report a reduction in depressive symptoms than studies of other ISG types (Fisher P = .02), but it is possible that this finding was due to confounding design factors rather than the nature of the ISG.
- **CONCLUSIONS:** There is a paucity of high-quality evidence concerning the efficacy or effectiveness of ISGs for depression. There is an urgent need to conduct high-quality randomized controlled trials of the efficacy of depression ISGs to inform the practice of consumers, practitioners, policy makers, and other relevant users and providers of online support groups.

## References that could be of interest

Trials. 2009 Oct 12;10:93.

Prevention of depression and anxiety in adolescents: a randomized controlled trial testing the efficacy and mechanisms of Internet-based self-help problem-solving therapy.

Hoek W, Schuurmans J, Koot HM, Cuijpers P.