



NST | Nasjonalt senter for telemedisin  
UNIVERSITETSSYKEHUSET NORD-NORGE  
WHO Collaborating Centre for Telemedicine

# *European network on e-health consumer trends*

## TTeC Workshop 10 June 2008



# Aim of the workshop

to discuss the findings from the eHealth Trends project – and the implications for future research

to develop a network for those interested in eHealth trends research from a citizens' point of view



# WHO/European Survey on eHealth Consumer Trends

- Focusing on the ‘new patients or consumers’ and the digital divide in Europe
- A citizens’ approach; patients, patients’ friends and relatives and citizens in general
- Co-funded by the Program of Community action in the field of Public Health (2003-2008) of the Health and Consumer Protection Directorate-General of the European Commission, June 2005-May 2008



# agenda

1. Welcome and introduction
2. eHealth Trends project overview / Tove Sorensen
3. eHealth Trends survey results / Per E Kummervold
4. eHealth Trends: Results from Denmark / Janne Rasmussen, Medcom and Birgitte Loland Ravn, Sundhed.dk
5. Discussion: Towards a European network on e health consumer trends: research topics and interest
6. Next steps



# E-health on the agenda

- eHealth on the agenda – for whom?
  - eHealth for system developers
  - eHealth for vendors
  - eHealth for health care professionals
  - eHealth for patients, relatives and citizens
- eHealth for health care systems – key questions:
  - Will eHealth increase or diminish social disparities in health?
  - Will eHealth increase or decrease the pressure on traditional health services?



# the aim of the project is

to investigate European health  
consumer's use of, their attitudes to and  
their desires with regards to Information  
and Communication Technologies (ICT)  
for health purposes, e-health



# eHealth trends partners



- Norwegian Centre for Telemedicine, University Hospital of North Norway, Norway (NST)
- Fyns Amt, Danish Centre for Health Telematics, Denmark (Funen)
- Friedrich-Alexander-Universität Erlangen-Nürnberg, Lehrstuhl für Medizinische Informatik, Germany (IMI)
- Foundation for Research and Technology - Hellas, Greece (FORTH)
- Health Promotion State Agency, Latvia (HPSA)
- Wroclaw Medical University, Poland (Wroclaw)
- Universidade de Aveiro, Portugal (Aveiro)



# publications

- Andreassen, H., Bujnowska-Fedak, M. M., Chronaki, C. E., Dumitru, R. C., Pudule, I., Santana, S., Voss, H., Wynn, R. (2007). European citizens' use of eHealth services: A study of seven countries [Electronic Version]. BioMed Central Public health, <http://www.biomedcentral.com/1471-2458/7/53>
- Andreassen, H. K., Wangberg, S. C., Wynn, R., Sørensen, T., & Hjortdahl, P. (2006). Helse-relatert Internettbruk i den norske befolkningen (Health-related use of the Internet in the Norwegian population). *Tidsskrift for den norske legeforening*, 126 2950-2952.
- Andreassen, H. K., Sørensen, T., & Kummervold, P. (2007). Ehealth Trends across Europe 2005-2007. Project report, <http://www.telemed.no/ehealth-trends-across-europe-2005-2007.536783-41025.html>
- Bujnowska-Fedak, M. M., Staniszewski, A., & Steciwko, A. Is Internet used for health purposes? - the Polish national survey. *Journal of Telemedicine and Telecare*, Volume 13, Supplement 1, July 2007, pp. 16-19(4)
- Chronaki, C., Kouroubali, A., Stathopoulou, A., Roumeliotaki, T., Orphanoudaki, E., Esterle, L., et al. (in press). "Internet Use for Health and Illness in Greece: Preliminary Results of a European Study on eHealth Consumer Trends". *Archives of Hellenic Medicine Magazine*.
- Dumitru, R., Bürkle, T., Potapov, S., Lausen, B., Wiese, B., & Prokosch, H. Use and Perception of Internet for health related purposes in Germany: results of a national survey. *International Journal of Public Health*, Vol 52, number 5, October 2007



# publications

Pudule, I., Grinberga, D., Velika, B., Gobina, I., & Villerusa, A. (in press). Interneta izmantošana veselības informācijas iegūšanai - pirmās starptautiskās ap-taujas rezultāti Latvijā. (The first national survey on eHealth consumer trends in Latvia) Rīgas Stradiņa universitāte, Zinātniskie raksti

Santana S, Sousa Pereira A. Da utilização da Internet para questões de saúde e doença em Portugal. Possíveis repercussões médico-doente? (On the use of the Internet for health and illness matters in Portugal and possible repercussions on the doctor-patient relationship) Acta Médica Portuguesa, Janeiro/Fevereiro 2007;II Série,20(1):47-58.

Staniszewski, A., Bujnowska-Fedak, M. M., & Steciwko, A. (in press). Korzystanie z Internetu medycznego przez mieszkańców Polski w 2005 roku - badania sondażowe (The use of medical Internet by Polish inhabitants in 2005). University Press monograph 2007.

Voss, H., & Ravn, B. L. (2007). Danskernes brug af sundhedsydelser på internettet. (Danes and their use of Internet health services) Ugeskr Læger 169(24), 2318.

Wangberg SC, Andreassen HK, Prokosch H-U, Santana SMV, Sørensen T, & Chronaki CE (2007) Relations between internet use, socio-economic status (SES), social support and subjective health in Europe. [Health Promotion](#)

[International, dam039.](#)



[www.telemed.no/ehealthtrends](http://www.telemed.no/ehealthtrends)

# eHealth Trends

WHO/EUROPEAN eHEALTH CONSUMER TRENDS SURVEY



*"Be careful about reading health books. You may die of a misprint."*  
(Mark Twain, 1835-1910)



# Research questions

- How many are using the Internet for health purposes?
- Who are using Internet health services?
- What are the most common Internet health related activities?
- What are citizens' expectations towards doctors when it comes to e-health services?
- How important is the Internet considered to be as an health information channel?



# Method

- Two surveys (18 months interval)
- 1,000 respondents in seven countries per year (age 15-80)
- Random digit dialling in representative age and gender strata
- 1<sup>st</sup> survey in Oct-Nov 2005, 2<sup>nd</sup> survey April-May 2007 in all countries



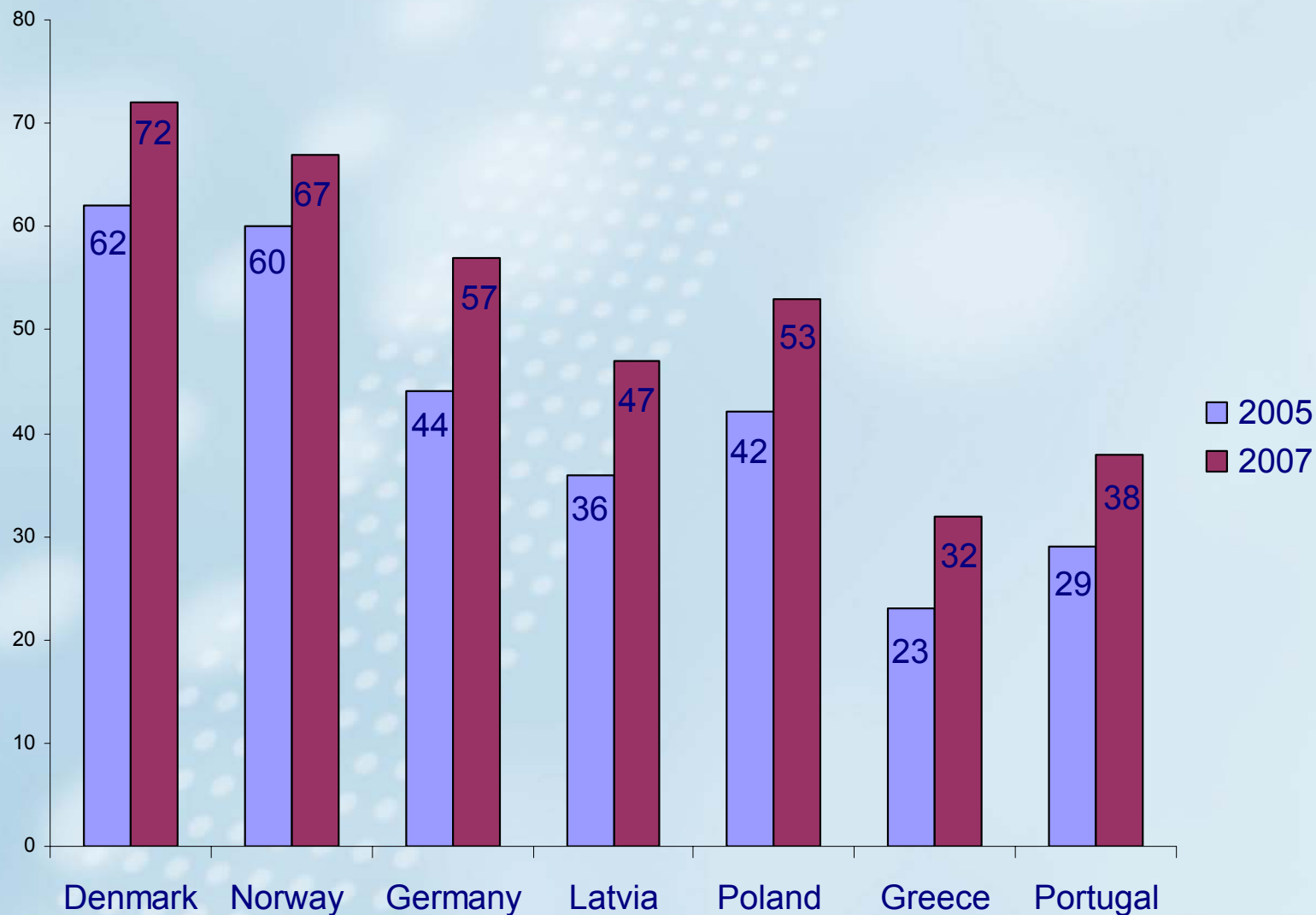
# Methods

- Developed based on three previous surveys in Norway (2000, 2001, 2002) and one European survey on health (Euro Barometer)
- Translated by the 'dual focus approach'
- Interview duration: 10-15 minutes
- Optional country- specific questions
- Results from second survey not published



# Internet health-use

(total population)

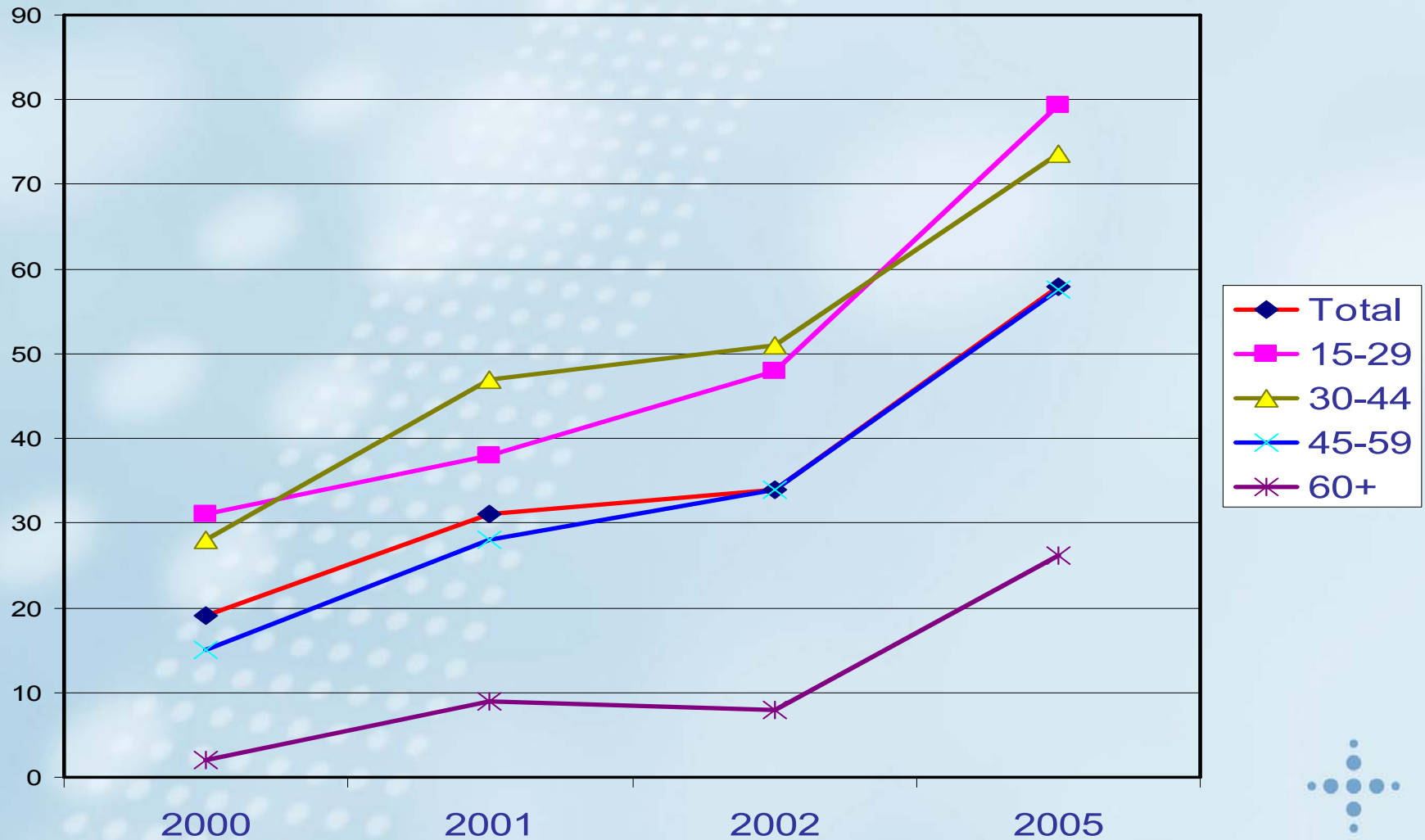


# Total Internet health use in Europe

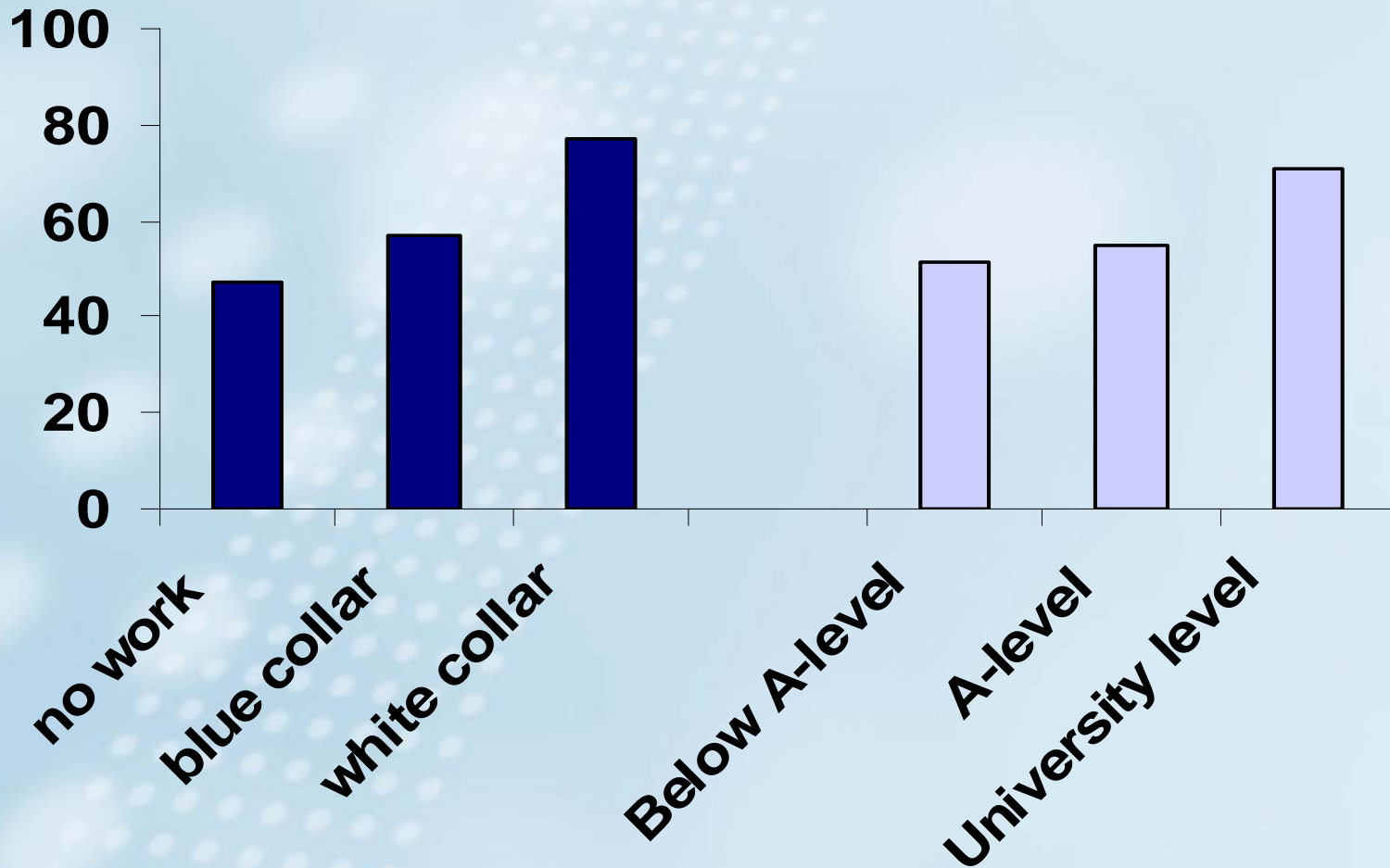
- In 2005: 42 % (70% of the Internet-users) had used the Internet for health purposes more than one time during the last year
- In 2007 the figure had risen to 54 %, or (nearly 80% of the Internet-users)



# Norway - Have you used the Internet for health purposes?



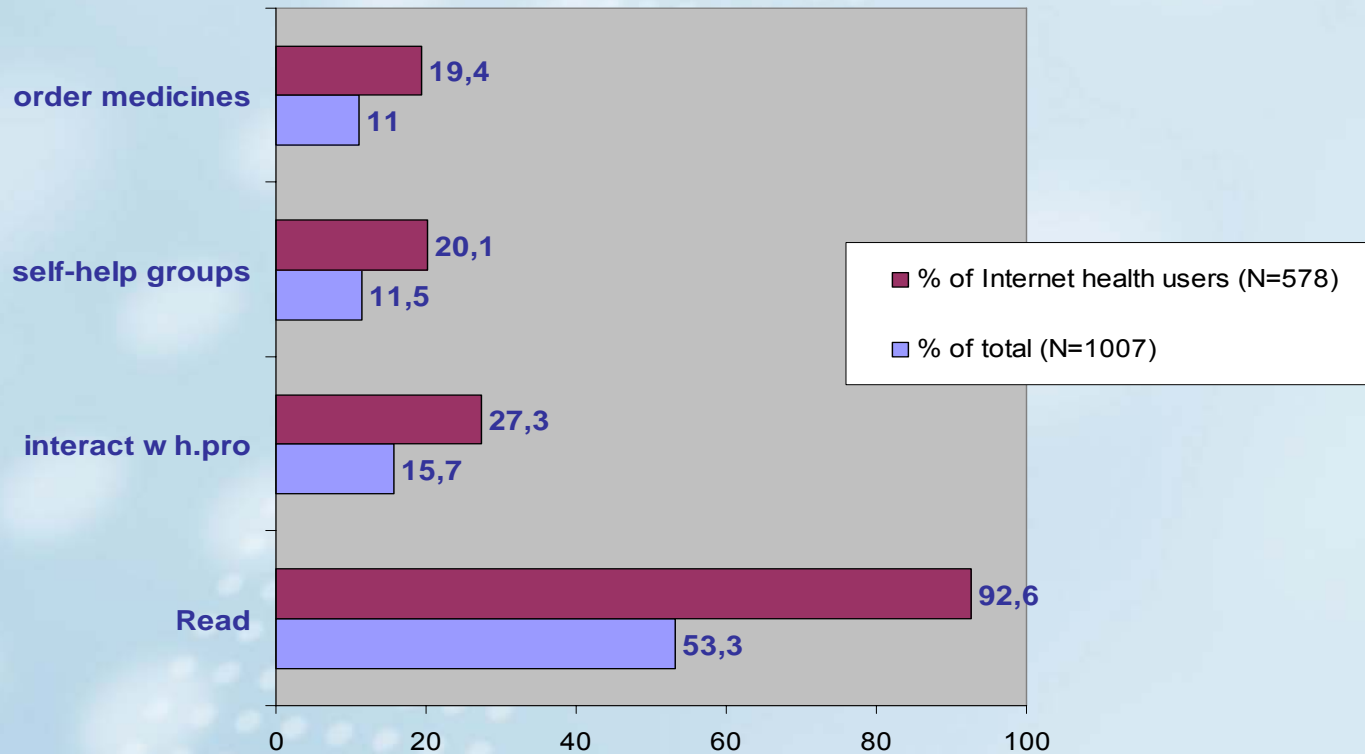
# Education and work status Health seekers



Sample: Total population 2005



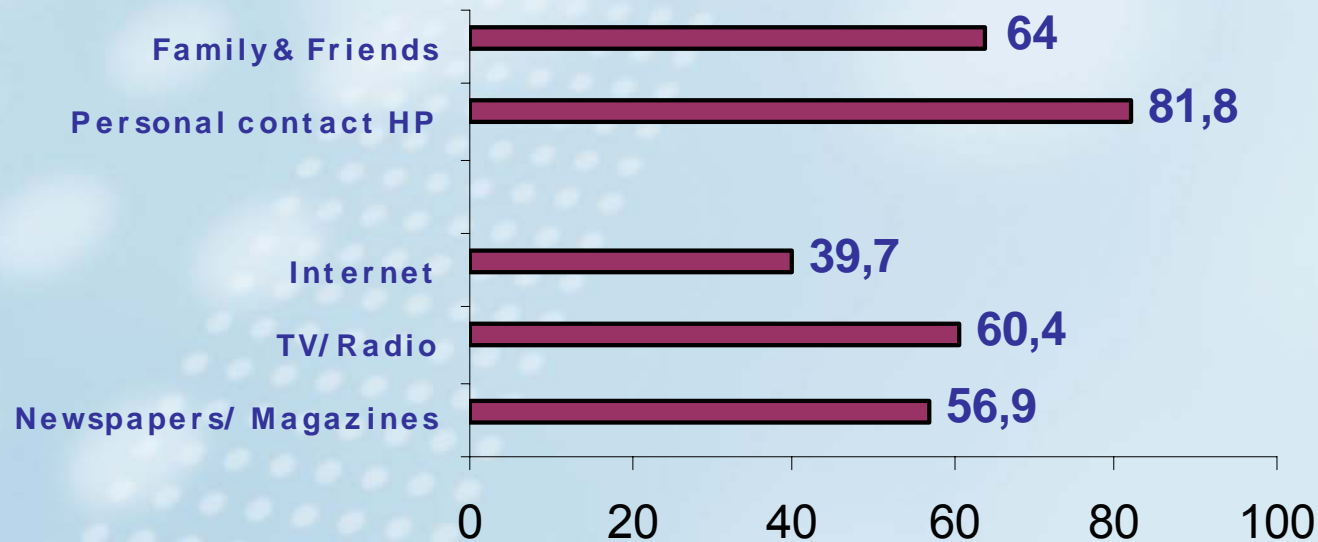
# Used the Internet to do what?



Sample: Total population 2005



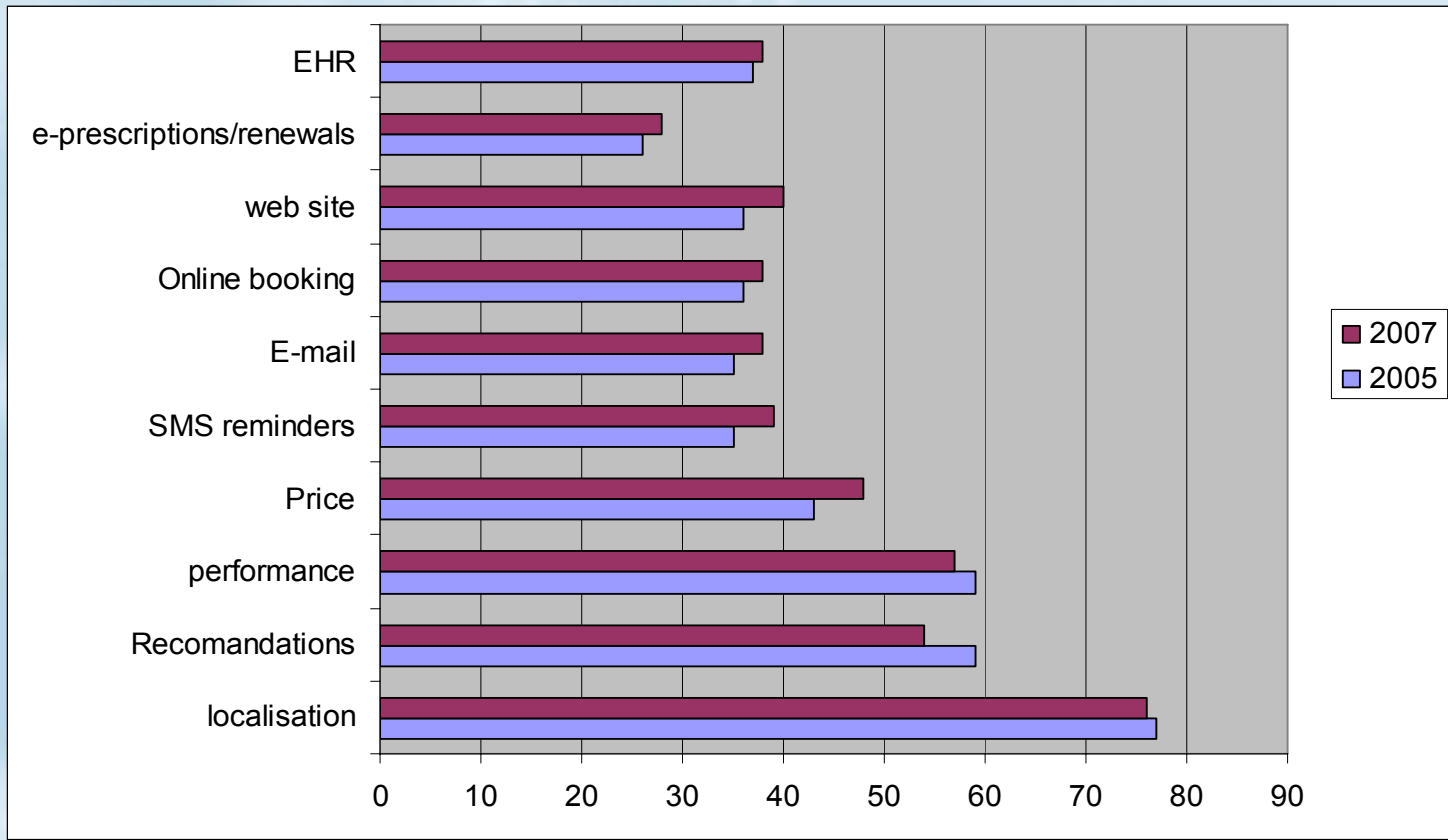
# Sources of health information with importance



Sample: Total population 2005



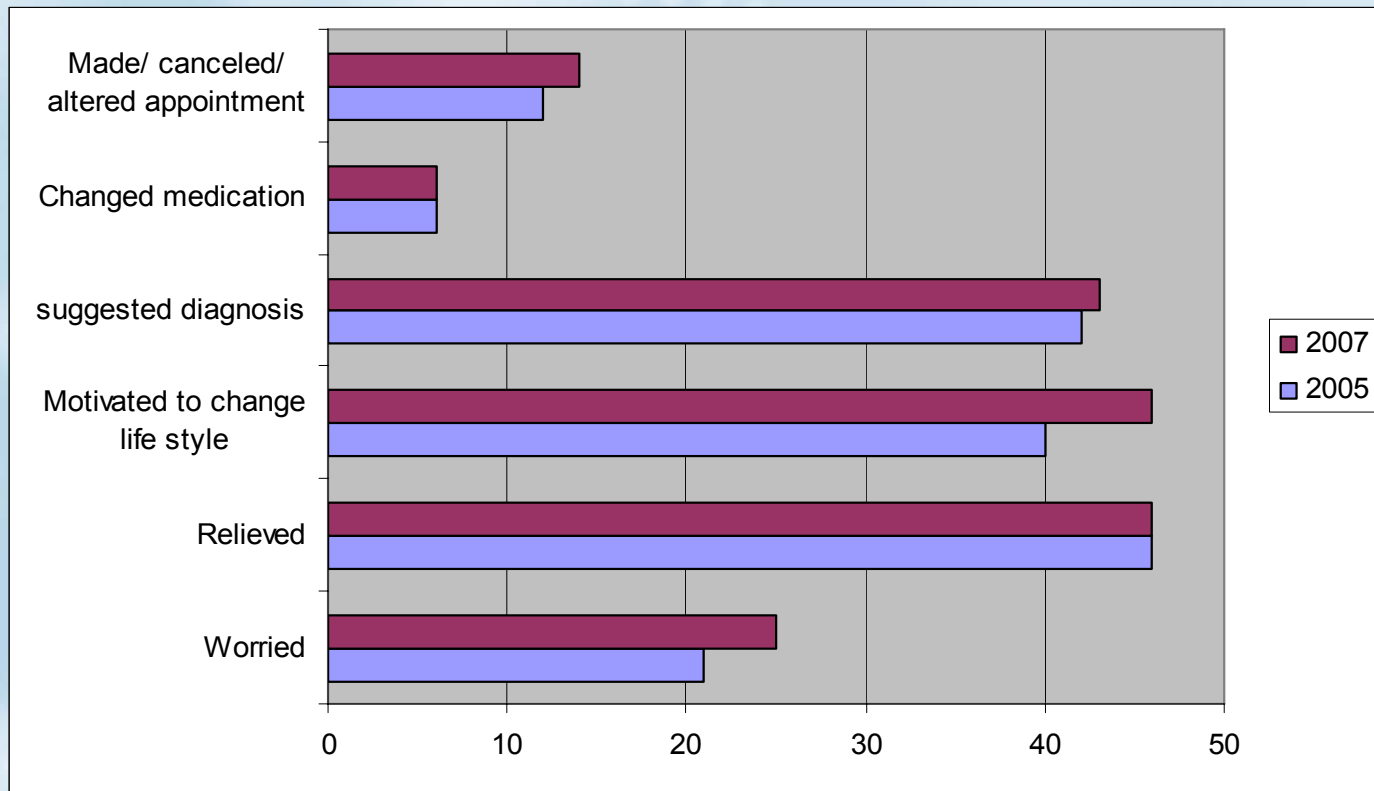
# When finding a new doctor...



Sample: Total poulation 2005/2007



# What are the consequences of using Internet for health purposes?



Sample: People having used eHealth services



# Other trends...

- More use of "interactive services"
- The growth in Europe is fairly similar to what we see in the US
- Highest eHealth growth among young women and older men



# Conclusions

- The majority of the European study population is using the Internet for health purposes
- The use of the Internet for health purposes is increasing in all countries included in the study
- There is a digital divide in Europe: Internet use is more frequent in northern and central Europe, followed by eastern and southern Europe respectively
- Health related use of the Internet: The divide seems to be diminishing as relative growth in eHealth is larger in southern Europe
- Internet has increased its importance as a channel for health information



# conclusions cont.

- Feelings of relief are more common than feelings of anxiety
  - Internet is still primarily used *information*, however there is a significant increase in the use of Internet for *communication*
  - There are growing expectations towards health care providers to provide eHealth services and tools
- eHealth does affect citizens' use of other health services
- eHealth is more used as a supplement than as a replacement to other health services
- Patients, next of kin and citizens seem to be more eHealth ready than health providers



# Report from the Danish survey



# Impact – national and European eHealth policies

- eHealth Trends: impacts for the European community (HSWP, glossary, Eurobarometer / householdsurveys)
- Examples from some participating countries



# Towards a European Network for eHealth Consumer Trends Research

- eHealth Trends 2005-2007 is a start – a basis to be followed up
- Developing an ‘eHealth Trends Network’ to survey the basic eHealth indicators and research the major challenges in eHealth:
  - the consequences and pressure on health services and inequalities in eHealth over time
  - case studies on those groups expected to have the highest benefits from using eHealth services
  - characteristics of those *not* using eHealth



# Research topics - proposal



# Summary. Next steps

- Platform / website
- Member structure
- Publish survey instrument
- Access to survey data
- Maintenance of website
- Funding future surveys



