



The 6th international Workshop on Wearable Micro and Nano Technologies for Personalized Health

24-26 June 2009. Oslo, Norway.



Seminar: EU-US pHealth experiences

June 26, 2009

Results and Recommendations from the 2008 EU-US pHealth event



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EU-US pHealth 2008



pHealth: Personalized Health Technologies and Comparative Effectiveness



***An EU-US Conference and White Paper
September 18-19, 2008 - Old Dominion University, Norfolk, VA, USA***



Home

Travel & Venue

The conference will be held in Norfolk, VA USA.

Program

***Information for
Authors***

Registration

Travel & Venue



Seminar: EU-US pHealth experiences



General Information



When: September 18-19, 2008

Where: Norfolk, VA USA

Who: Researchers, industries and health professionals from:

- Czech Republic , England, Finland, Germany, Greece, Italy, Spain
- USA

Why: to discuss recent advances and strategic needs in Personalized Health Care and the ways of fostering academia-industry collaboration.

Organized by: Old Dominion University, Virginia USA

Regensburg University Medical Center, Germany

Politecnico di Milano , Italy



Outline

- Definition of Health
- Objectives of Personalized Health Care
- Demographic considerations
- Technology innovations
- Provider-patient relationship
- Summary



Definition of Health



The World Health Organization (WHO) defines health as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity”.

This definition does not just reduce health to its physical aspects but rather includes mental and social, socio-psychological dimensions as well.

Generalized anxiety disorder (GAD) is characterized by an excessive, uncontrollable and often irrational worry about everyday things, which is disproportionate to the actual source of worry.



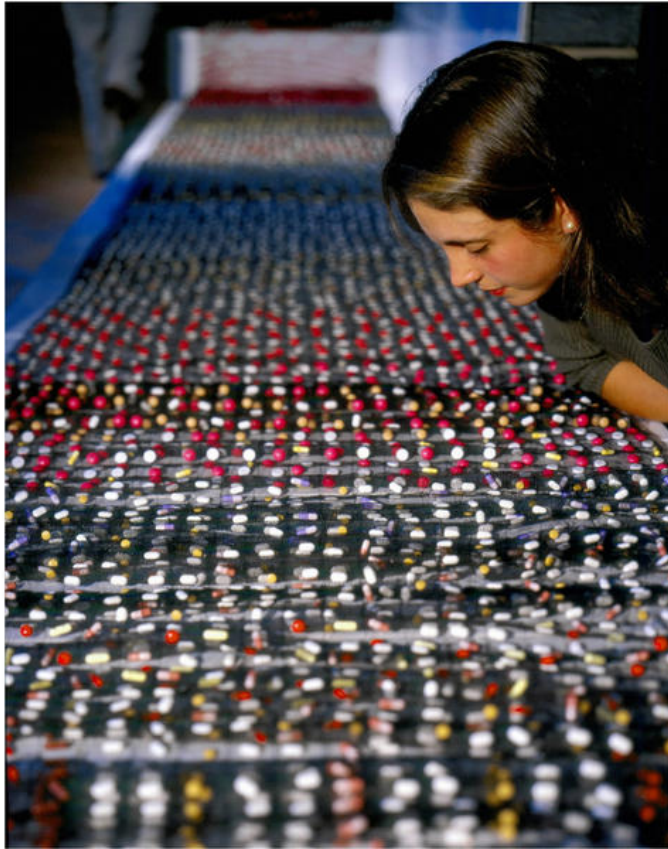
Objective of PHC



The ultimate objective in Personal Health Care (PHC) is to increase the quality and years of healthy life of people.



Current approach to well-being



2003 British Museum
Special Exhibit : “Cradle to Grave”

“Cradle to Grave” explores our current approach to health in Britain today (2003).

Each length contains over **14,000 drugs**, the estimated average prescribed to every person in Britain in their lifetime.

This does not include pills we might buy over the counter, which would require about **40,000** pills each.



Demographic considerations



Demographic changes and global population growth impose an increasing challenge to the current health care system. Even in high income countries, a significant part of the population fails to get access to quality health care despite increasing investments on health (CBO 2005).

We are ageing as the number of young people is decreasing relative to the elderly, .

Rate between Patients and Family Doctors is increasing.

According to the United Nations statistics, there are around 860 million patients with chronic diseases worldwide.



Technology innovations 1/2



Any technology needs to follow standard. The Continua Health Alliance, a global trade alliance of more than 170 companies, is developing interoperability standards for medical equipment, devices, and software that connect providers and patients for remote monitoring of chronic conditions, aging in place, and promoting personal health and fitness.

Online storage of personal health records (PHRs) is a potential growth area to promote consumers' access to their own health information. Free personal health record systems are available from Microsoft, Google, and others.



Technology innovations 2/2



Body Sensor Networks (BSNs) solutions have been proposed for patient monitoring and elderly care, targeting both hospitals/clinics and at-home healthcare service provision.

There is a variety of sensor types for healthcare applications: wearable, ambient, implantable, textile-embedded, lab-on-a-chip schemes, targeting specific monitoring scenarios and user requirements.

Use of Virtual reality for the treatment of psychological disorders and stress. Systems for helping personal management of drugs.

Use technology at administration level, physician level, and patient level.



Provider-patient relationship



Patients increasingly want to make informed, real-time decisions with their clinicians and care teams using complete and current health information.

Consumers of all demographics seek more information and self-direction of their health care with the objective of living independently.

Need to focus on programs and services that promote independent living in a home setting. As we already do home banking and home e-commerce, why not doing some more in home e-health too?



Summary



Become patient-centered, affordable and cost-efficient and provide high quality of services – robust and easy-to-handle.

Effective and efficient and intelligent usage of extensive clinical and medical data.

Moving from “one drug fits all” to personalized therapy to giving the right treatment at the right dose which is designed for the right person at the right time will lead to the right outcomes.



Summary 2/2



The ultimate goal of personalized medicine is to translate genomic data into specific knowledge about the related disease to enable the informatics oriented clinicians to diagnose genetically predisposed conditions, and then recommend personal preventive measures and prescribe targeted effective medications which are efficient and least likely to cause adverse reactions on individuals.



Thank you

to the participants of the
2008 EU-US pHealth event