



The Health@Home service concept – vision and challenges

Milon Gupta, Eurescom
gupta@eurescom.eu

Networking session N.29
ICT Event, Lyon, France
26 November 2008

Overview

- **Rationale**
- **Service model**
- **Feasibility**
- **Conclusions**

Rationale – Why Health@Home?





Ageing of the European society





Chronic Diseases on the rise





Unhealthy Lifestyle on the rise



© 2008 Eurescom GmbH, Milon Gupta. Photo: colros – Source: Flickr.com

Cost Explosion



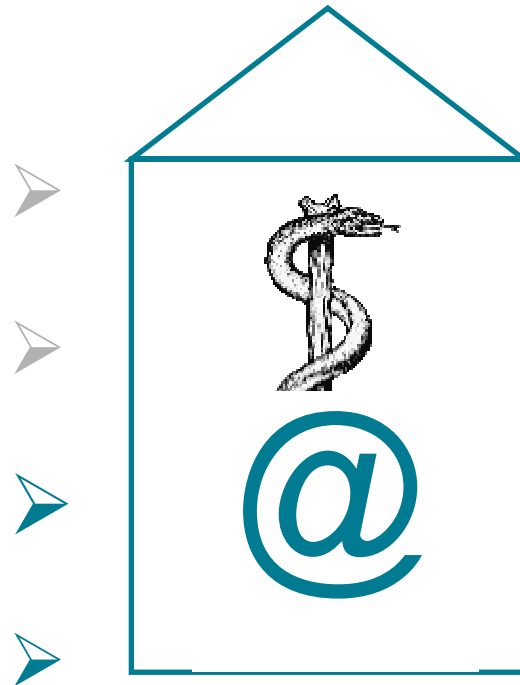


Solution

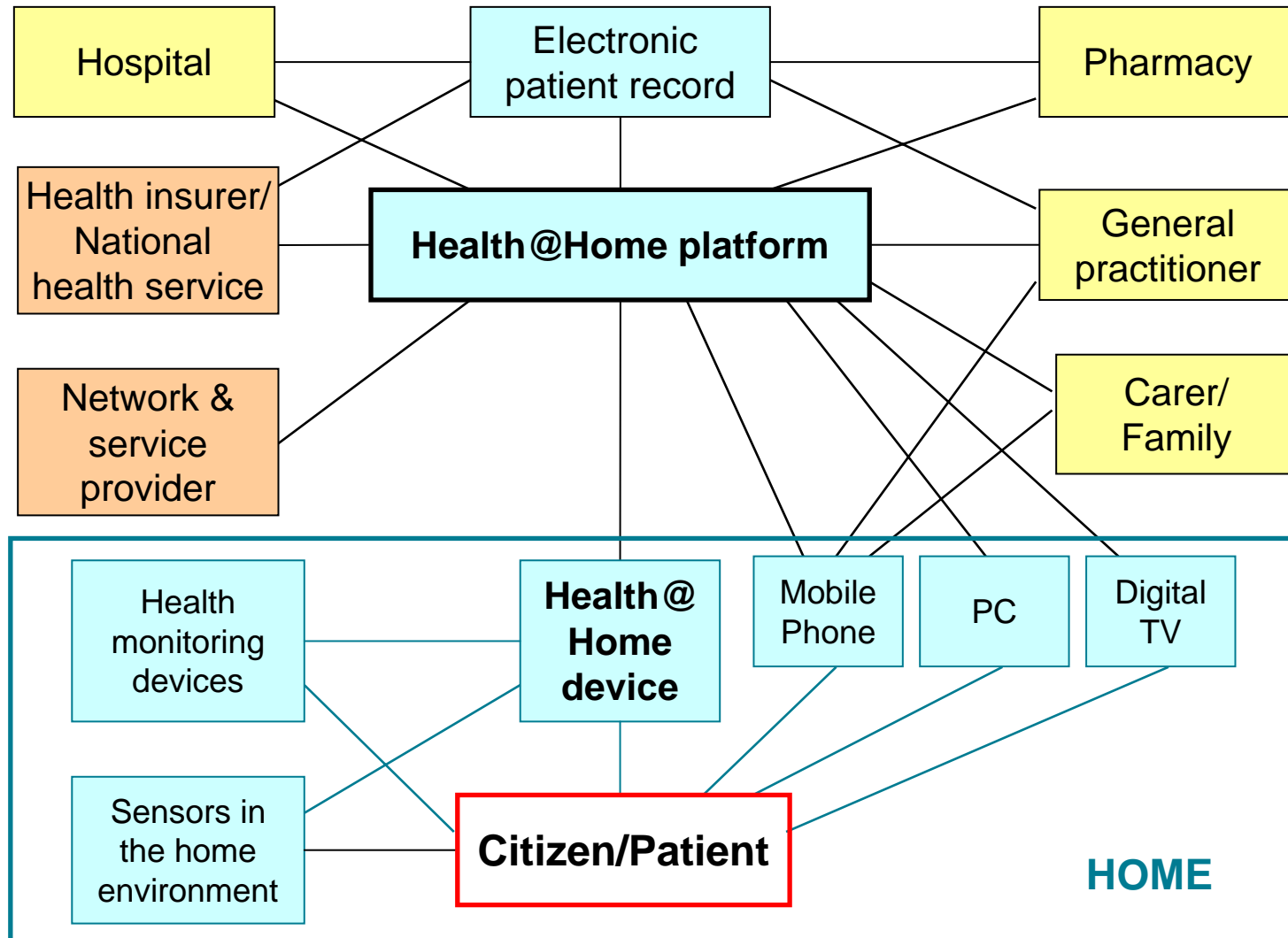
**Bring ICT-enabled prevention
and healthcare to the home**



Health@Home service model



Vision of a service model



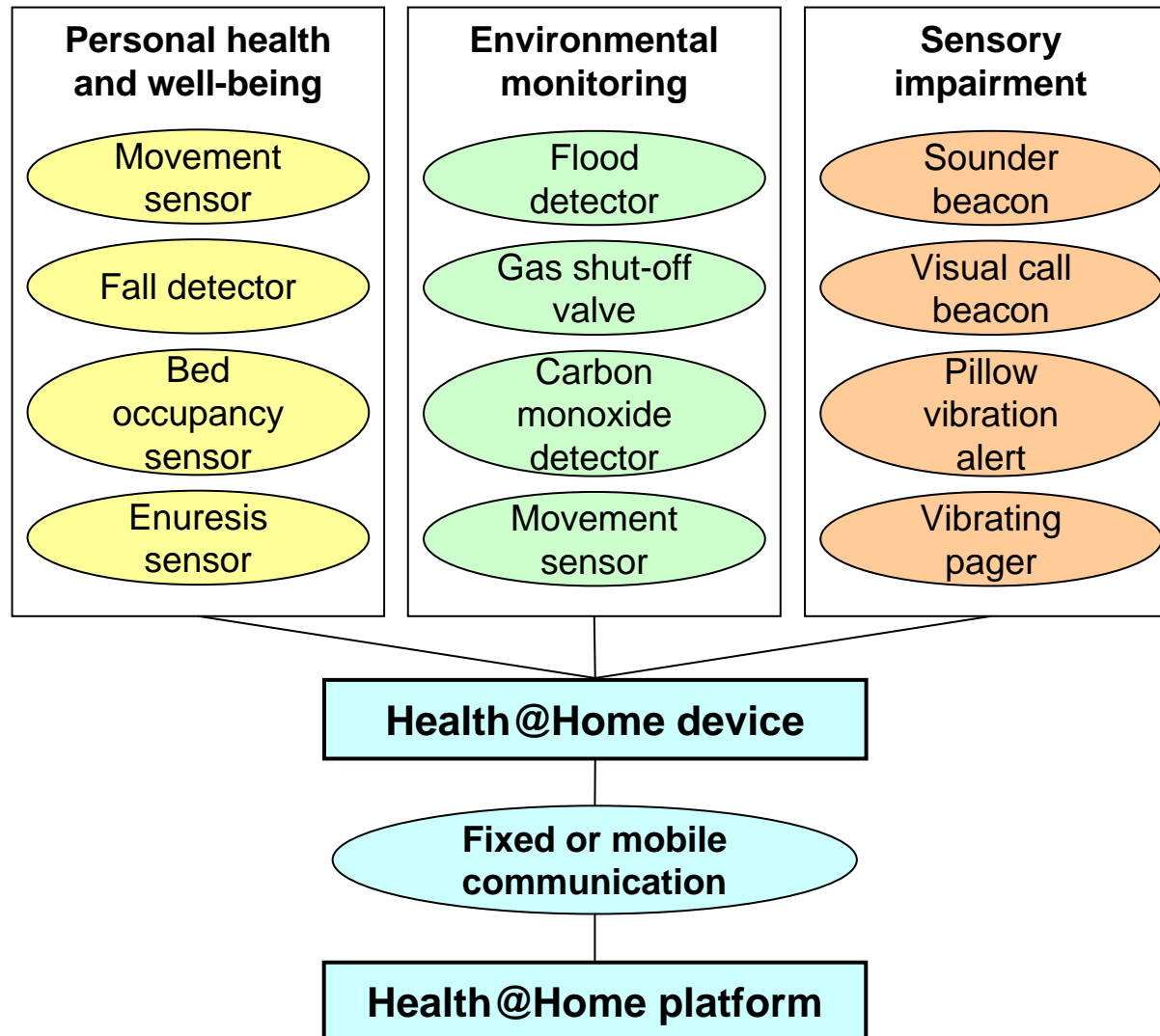
Characteristics of the model

- Based on open standards
- Multimodal access via multiple devices
- Linked to electronic health record
- Customisable to personal user needs
- Modular approach to adapt to different care conditions
- Mobility and portability
- Role-based access rights

Wide range of services

- Monitoring of personal health factors
- Monitoring of patient environment
- Automated analysis of personal health data
- Automated alerts, e.g. medication reminders
- Support for behavioural changes (e.g. diet)

Sensors in the Health@Home model



Feasibility of the Health@Home model



Critical technical factors

- Integration of technologies and devices
- Standardisation
- Interoperability
- Privacy, security and data protection
- Scalability and reliability
- Mobility

Non-technical barriers

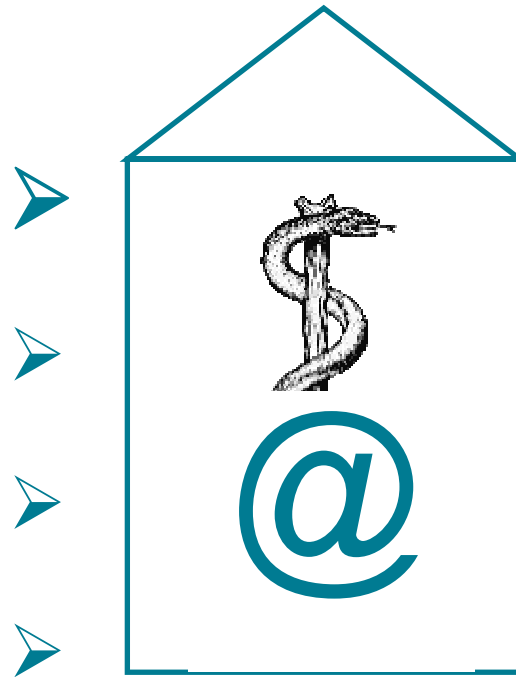
- Inappropriate regulation
- Market fragmentation
- Lack of financial resources
- Low user acceptance

Drivers

- Increase of chronic diseases
- Cost pressure
- Patient needs

- Advances in home networking
- Progress in standardisation

Conclusions



3 main conclusions

- Pressure towards **patient empowerment** through Health@Home service will grow
- Implementation of Health@Home vision will be challenging, particularly due to **interoperability issues**
- **Large, interdisciplinary research project** needed to explore interoperability, service integration, and usability aspects of a Health@Home service platform

Contact



Milon Gupta

Eurescom GmbH

Heidelberg, Germany

Phone: +49 6221 989 121

E-mail: gupta@eurescom.eu

Website: www.eurescom.eu