

The business case and sustainability of HealthGrid solutions

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1. Introduction

- **22 short cases HealthGrids**
 - desk research
 - limited availability of information
- **Two detailed case studies**
 - extensive desk research and interviews
 - economic case
 - business case
- **Developments in HealthGrids**
 - insights from current activities
 - searching for sustainability

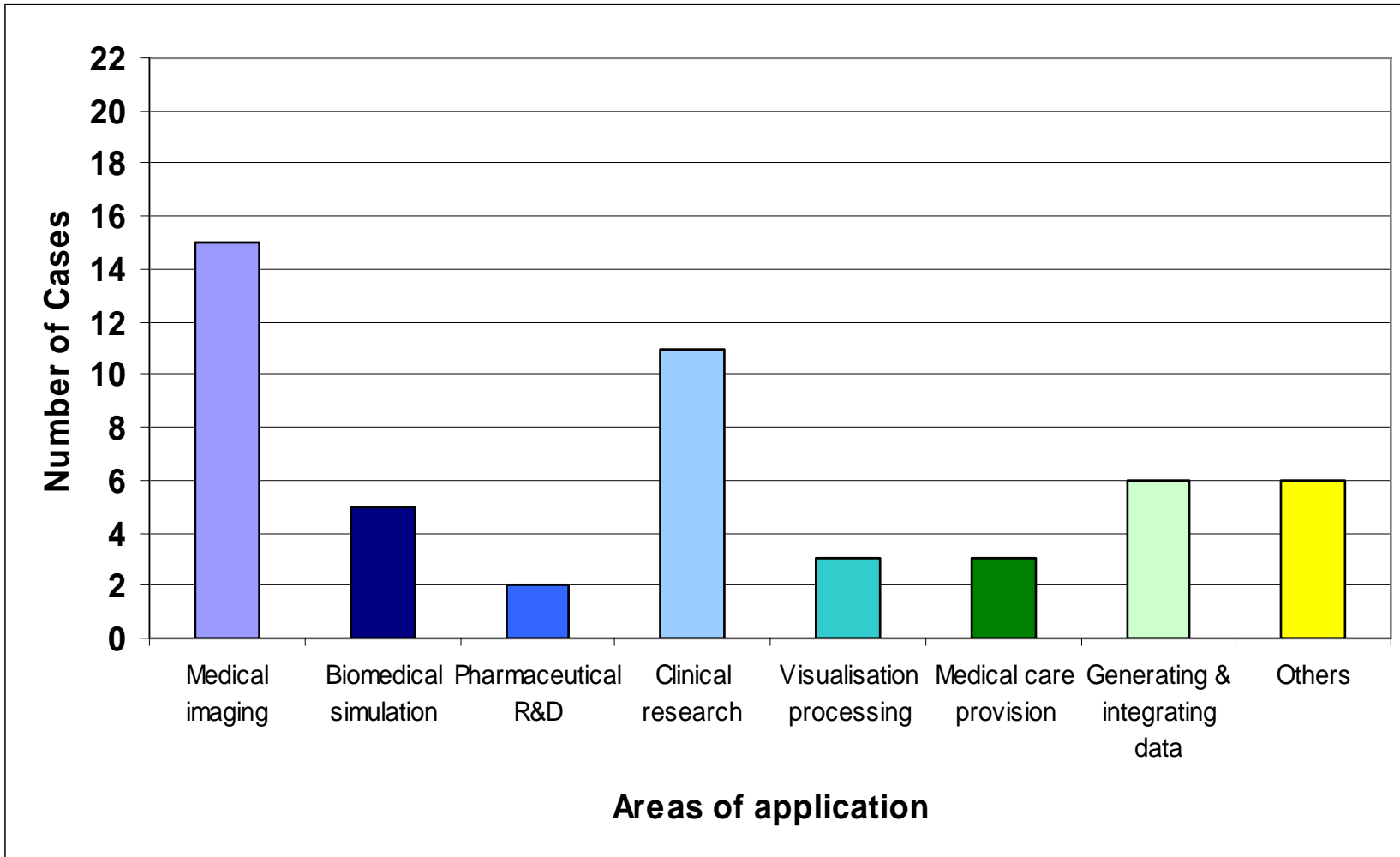
Socio-economic versus business case perspective

- **A socio-economic impact assesment includes:**
 - all stakeholders
 - tangible and intangible *benefits and costs*
 - financial and non-financial items
- **A business case is concerned with:**
 - one, or a small number of organisations
 - *financial impact on that organisation [Cash flow/affordability; return on investment (RoI)]*
 - strategic behaviour – the competition game
 - legal issues

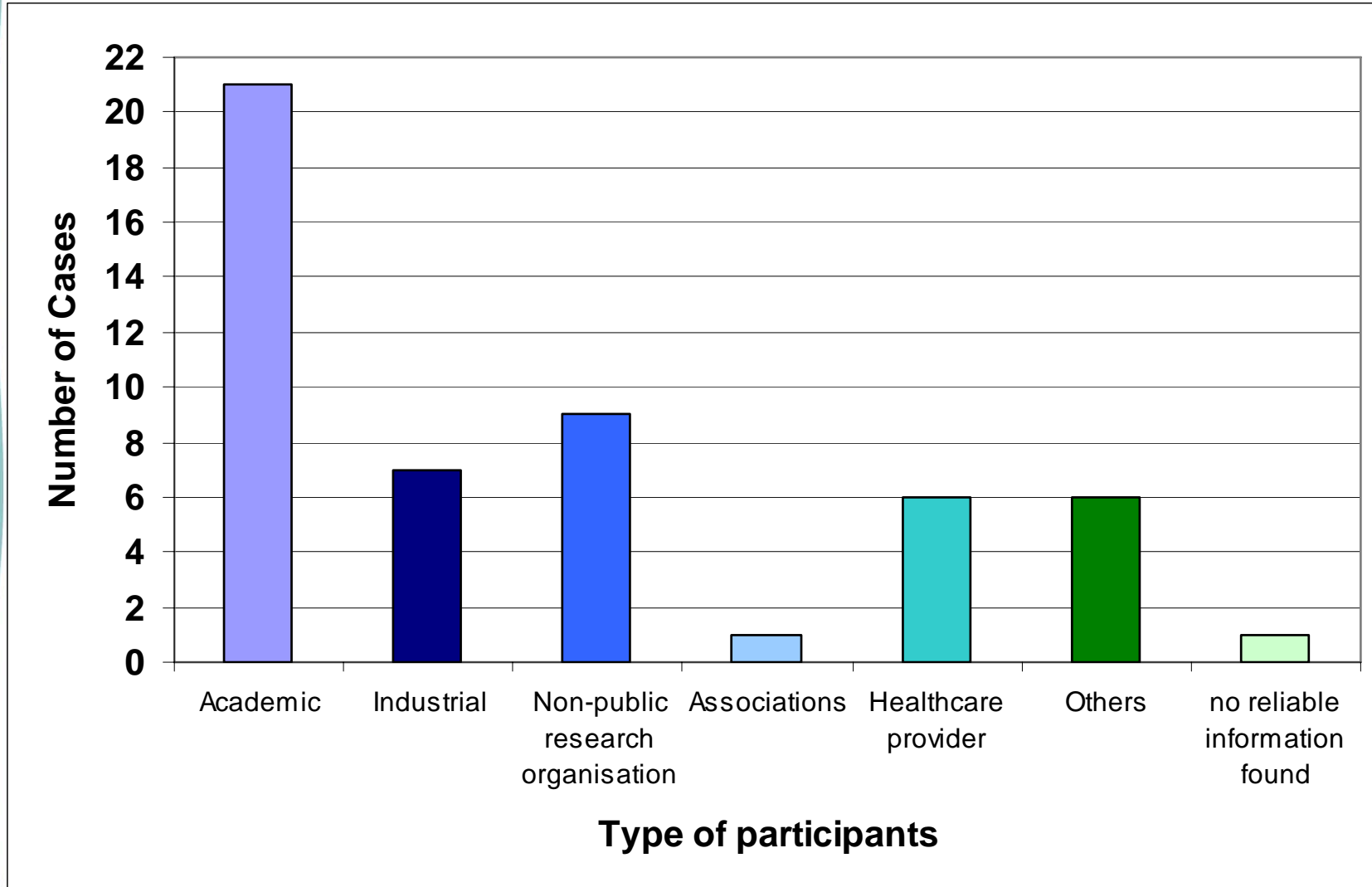
2. Overview of HealthGrid implementations

- Most applications are using **Grids as a resource** - for computing or as a network for data sharing
- **No Knowledge Grid operational yet**
 - ACGT (Advancing Clinico- Genomic Clinical Trials on Cancer) project aims to build a knowledge grid by 2010
 - MammoGrid is set up to allow for an ‘upgrade’, but these features not yet in routine operation
- HealthGrids are **a new phenomenon:**
 - All projects started between 2002 and 2006
 - A standard duration is between 2 and 4 years

Areas of application

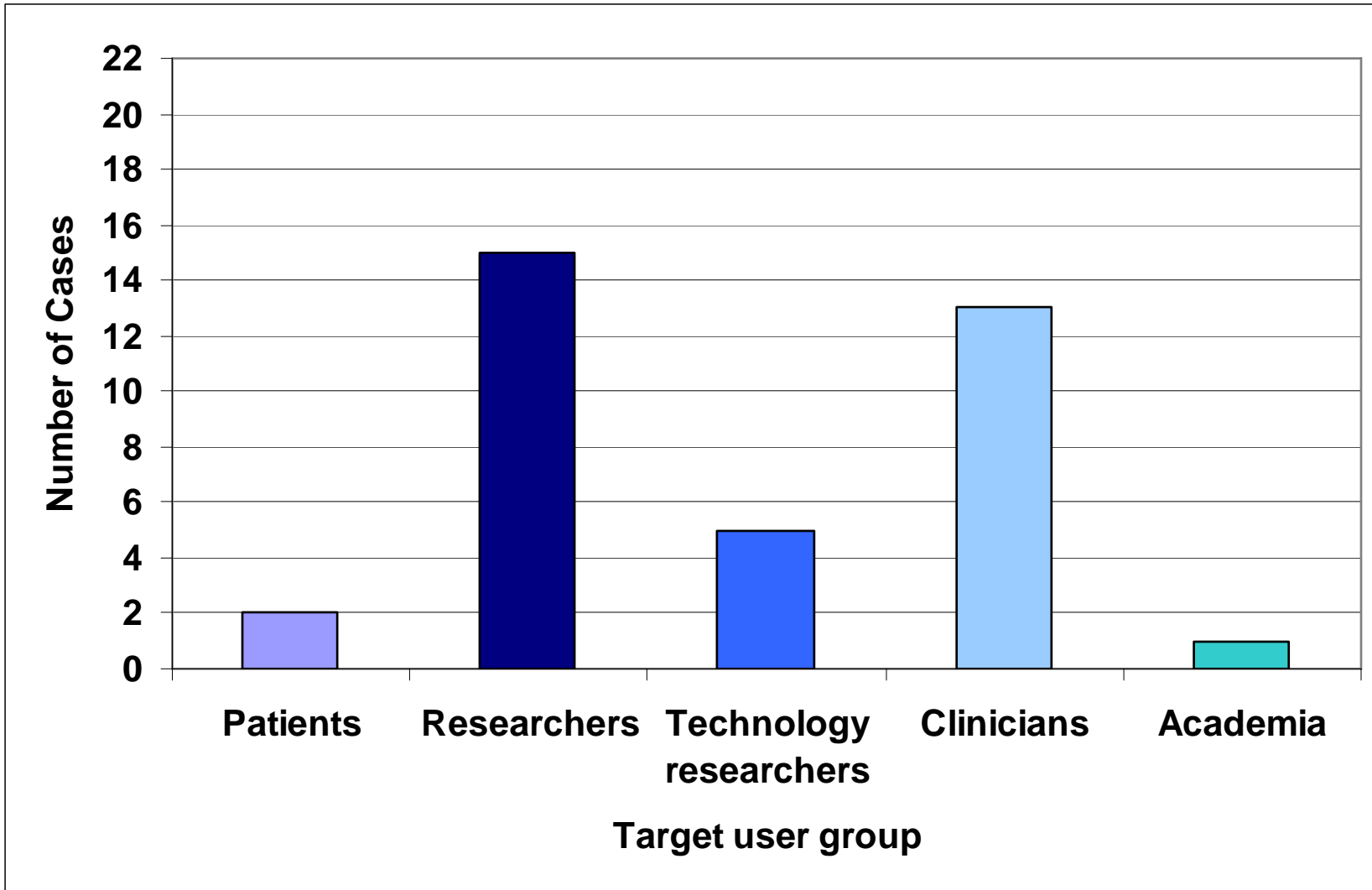


Organisations involved

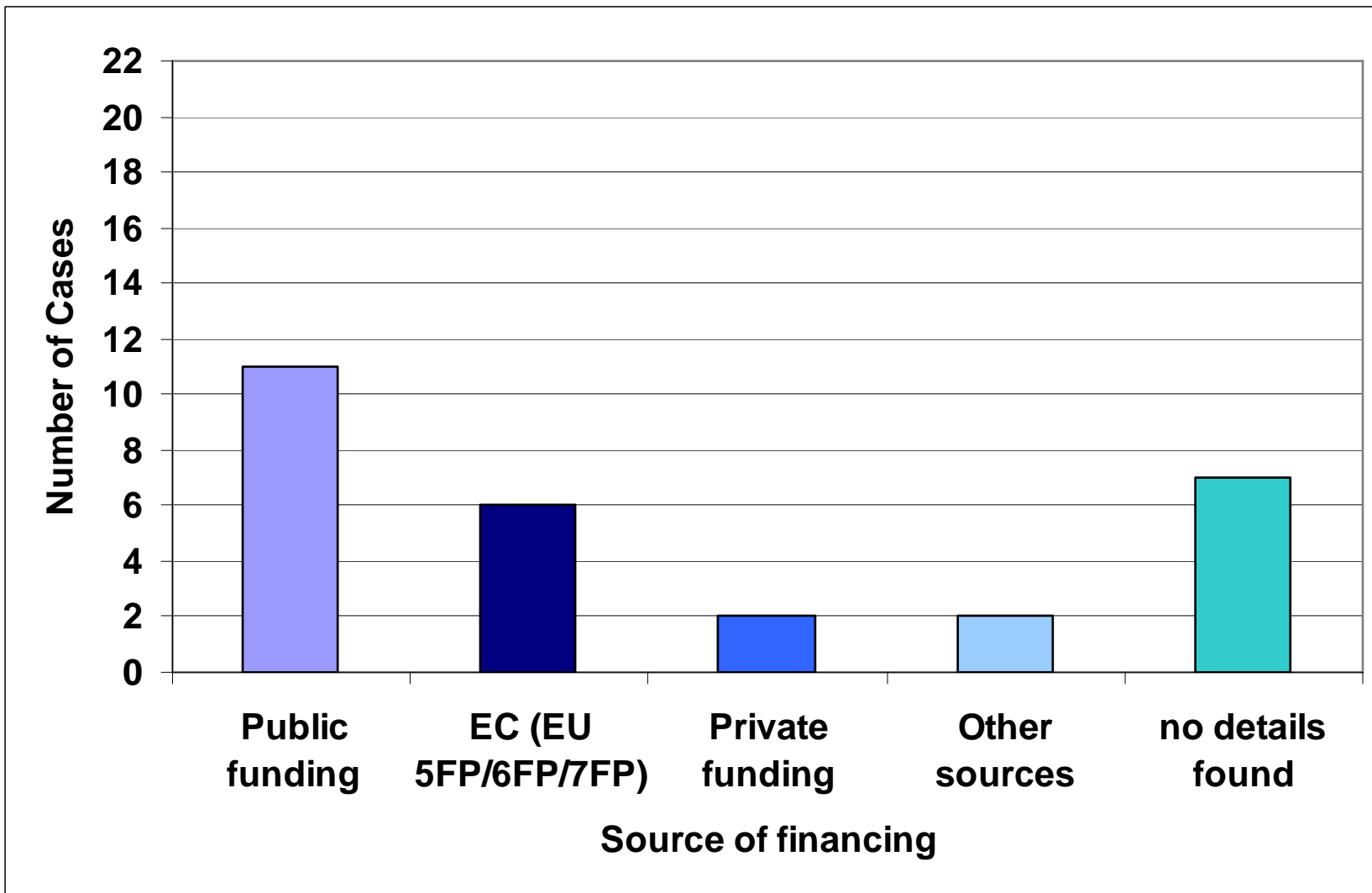


Targeted users

(data to be treated with caution)



Financial arrangements



Interim conclusions I

- **Business cases are not a driving force** of HealthGrids today
- Sustainability is not an explicit issue
- Project based activities: **time limits** on funding, goals & objectives
- Activities are mainly **playgrounds**:
 - development projects
 - illustration activities
 - test beds
 - proof-of-concept initiatives
- Legal and regulatory **uncertainties**
 - regarding the storage and use of data
 - ownership and dissemination of results

Interim conclusions II

- **Integrating content** from a large number of databases is a must
- **Critical issue: to get the attention and interest of users:**
 - medical researchers
 - treating physicians
- **Scientists and researchers in technology do not have immediate incentives** to focus on sustainability
- **Big potential gap** between what is socio-economically wise and what is sustainable
- **Important role of networks** (data and people)
- **Strong case for continuous public funding** (Net socio-economic benefits to be expected, but business case difficult to establish)

3. Detailed case studies

Case study I:

WISDOM

(Wide In Silico Docking On Malaria)

WISDOM: overview

- **An initiative for using computing grids for drug discovery**
 - Targeting neglected and emerging diseases
- **No business intentions at the start in 2005**
- **Initial success may pave the way towards sustainability**
- **Currently plans are entertained to commercialise a service based on HealthGrids**

Case study II:

Mammogrid

(Image processing in the field of breast cancer)

MammoGrid: overview

- **Connecting hospitals in a virtual organisation, sharing databases of mammography and images**
- **Based on associated meta-data**
 - standardisation and quality control of mammograms
 - computer-aided detection (CADe) algorithms
 - epidemiological research
- **FP 5 project 2002-2005**
- **Technical optimisation activities in Spain**
- **Market entry planned for 2010**

4. The future potential:

Searching for the business case of HealthGrids applications

Re-cap of interim conclusions

- **Business cases are not a driving force of HealthGrids today**
- **Project based activities – no classical business case structures**
- **Activities are mainly playgrounds**
- **Legal and regulatory uncertainties**
- **Need to focus on integrating content**
- **Critical to get the attention and interest of users**
- **Technology developers do not have immediate incentives to focus on sustainability**

Confirmation by detailed cases

- **A sceptical short term perspective with reasons for more optimism in the longer run**
- **From a socio-economic perspective the case for HealthGrids seems quite robust**
- **Continuing public (funding) involvement will be necessary to reach sustainability**
- **Research applications “easier” than clinical solutions**
- **Biggest hurdles:**
 - **Usability and acceptability issues**
 - **Discrepancy between social benefits and private incentives/financial viability**

Thank you for your attention

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