

# *TeleMed and eHealth'08*



## Integrating eHealth into hospital workflows –

Evidence on the effectiveness of the integrated patient record system at the University Hospitals of Geneva (HUG)

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# Overview

1. The EU EHR IMPACT study and method
2. HUG and the integrated Clinical Patient Record (CPR) system
  - Economic impact: some facts & figures
  - Lessons learnt

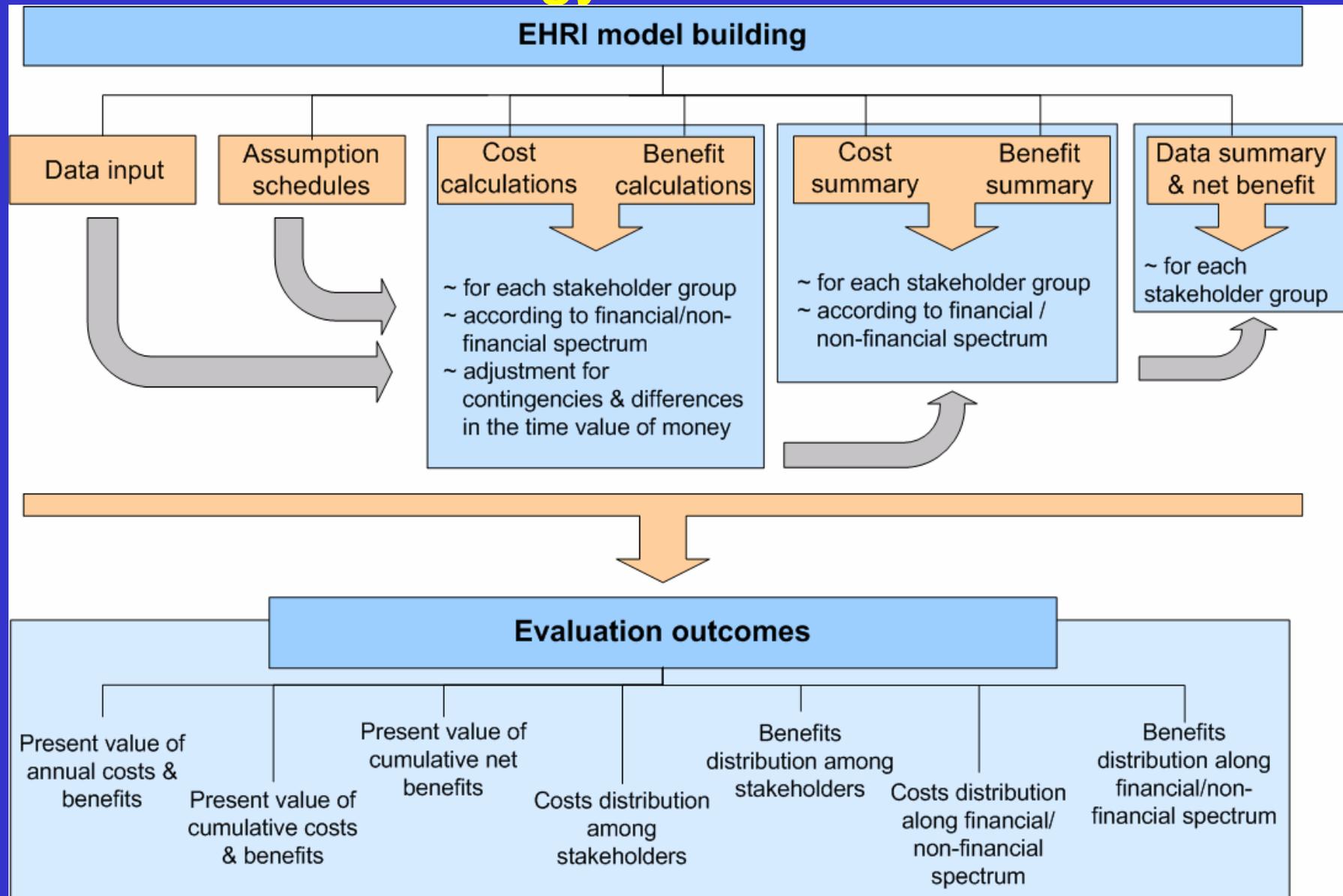
# The EHR IMPACT study

## Socio-economic impact of interoperable electronic health record and ePrescription systems in Europe

- Identification and analysis of 10 good practice cases
- Policy recommendations to foster their diffusion in Europe
- Method of evaluation:
  - Based on eHealth IMPACT study ([www.ehealth-impact.eu](http://www.ehealth-impact.eu))
  - Cost benefit analysis (CBA) from an economic perspective
  - All relevant costs and benefits for all stakeholders
  - Net *economic* gains

[www.ehr-impact.eu](http://www.ehr-impact.eu)

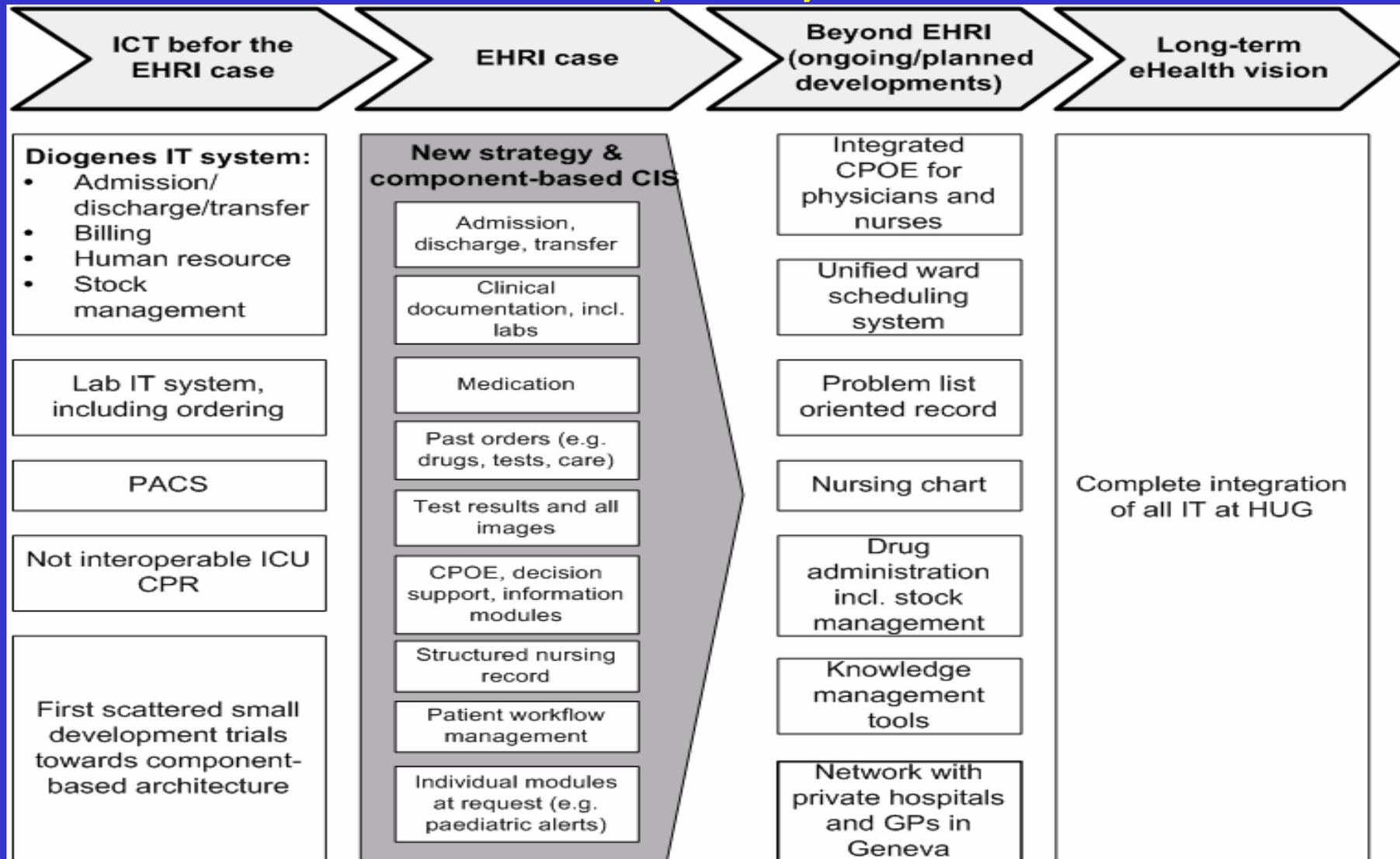
# Methodology: the EHRI model



# About the University Hospitals of Geneva (HUG)

- Consortium of public and teaching state hospitals
- 9 major facilities in four campuses
- > 30 ambulatory facilities
- Community, primary, secondary and tertiary care
- > 48'000 inpatients and > 800'000 outpatients yearly
- > 2'000 beds
- > 7'000 care professionals,
- Annual budget of nearly 1.4bn CHF

# About the Computerised Patient Record (CPR)



# Costs and financing of the integrated CPR system at HUG

- Investment contributions from the state
- Operational and maintenance costs born by HUG
- Implementation costs, including users' time
- Extra time spent on ward rounds by doctors
- Omitted income from avoided admissions

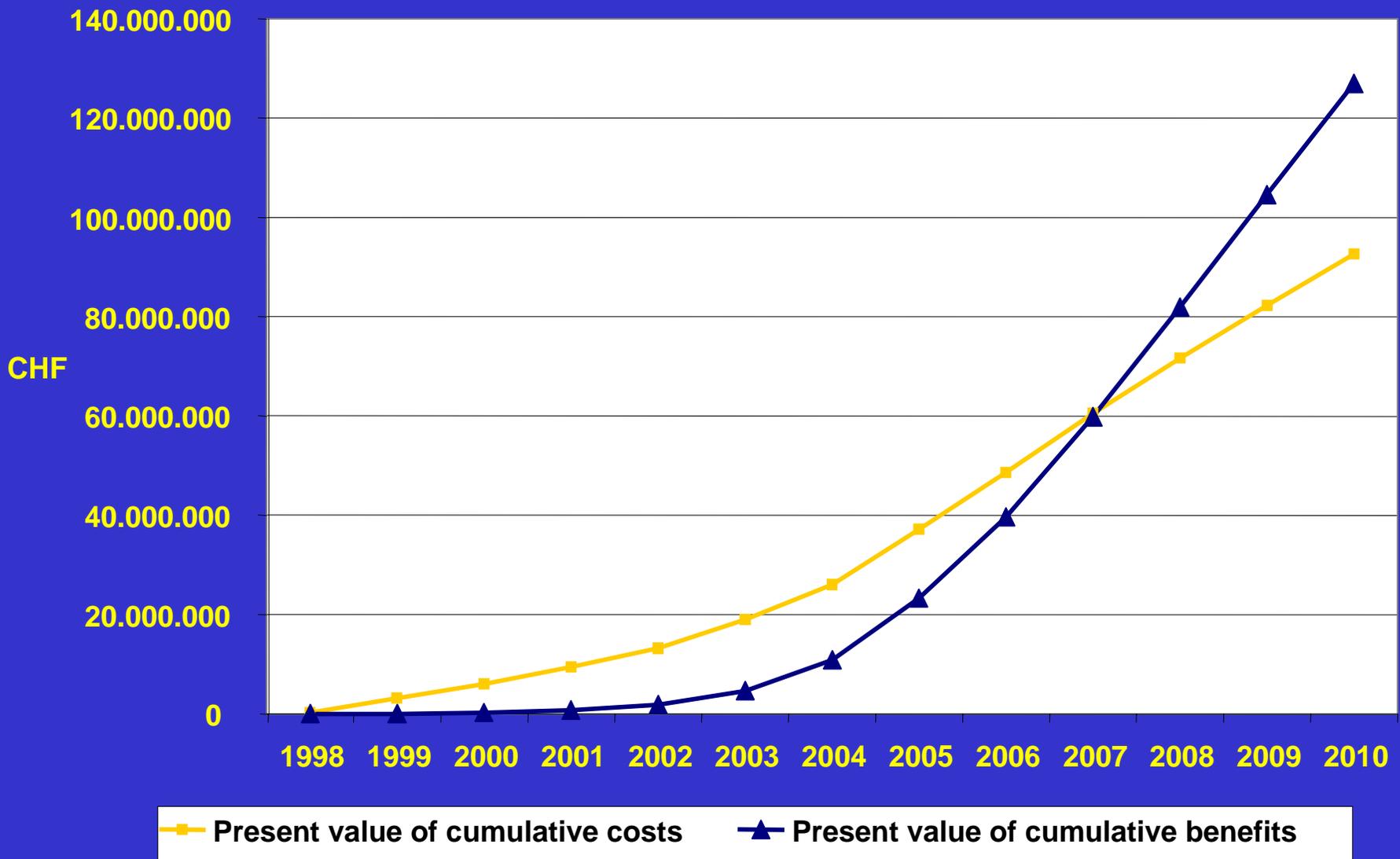
# Benefits from the CPR system at HUG

- Citizens
  - Better care because of better informed carers
  - Patient safety
  - Time saving and avoided admissions
- Doctors & nurses
  - Nurses do not have to search for doctors
  - Life made easier through integrated presentation of different reports
  - Doctors do not have to guess while waiting for data
  - Do not have to waste time looking for records
  - Lower exposure to risk – carers feel safer, less vulnerable

# Benefits from the CPR system at HUG

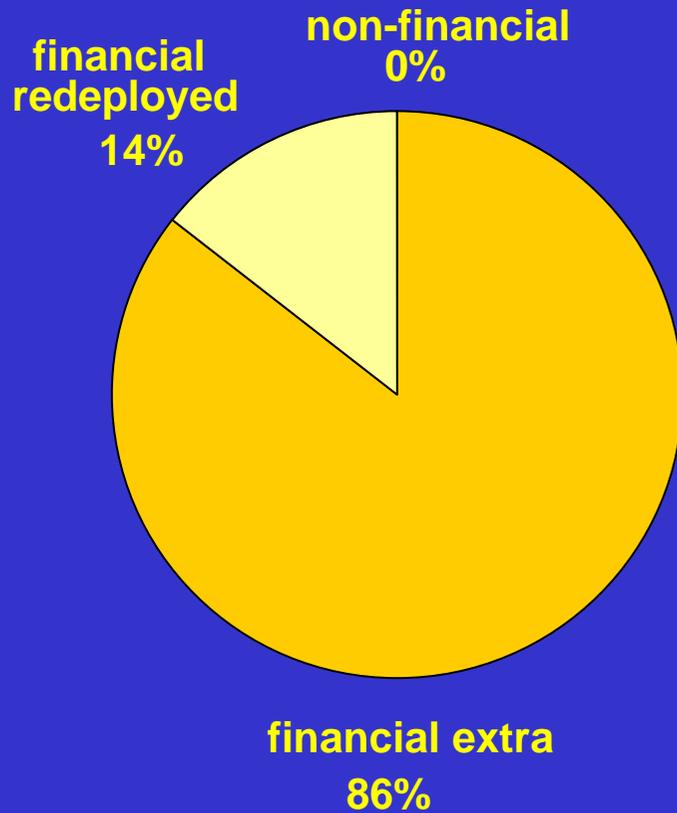
- Benefits to HUG
  - Time savings – redeployment of resources:
    - *Ward rounds*
    - Looking for colleagues
    - Looking for data
    - Writing discharge letters
  - Reduction in exposure to risk due to better clinical governance
    - Critical information is always available where needed
    - Lower risk of errors when transferring patients across HUG sites
  - Some avoided admissions – also for insurances
  - Reductions in number of tests
  - Extra income from better billing processes

# HUG – cumulative *economic* performance

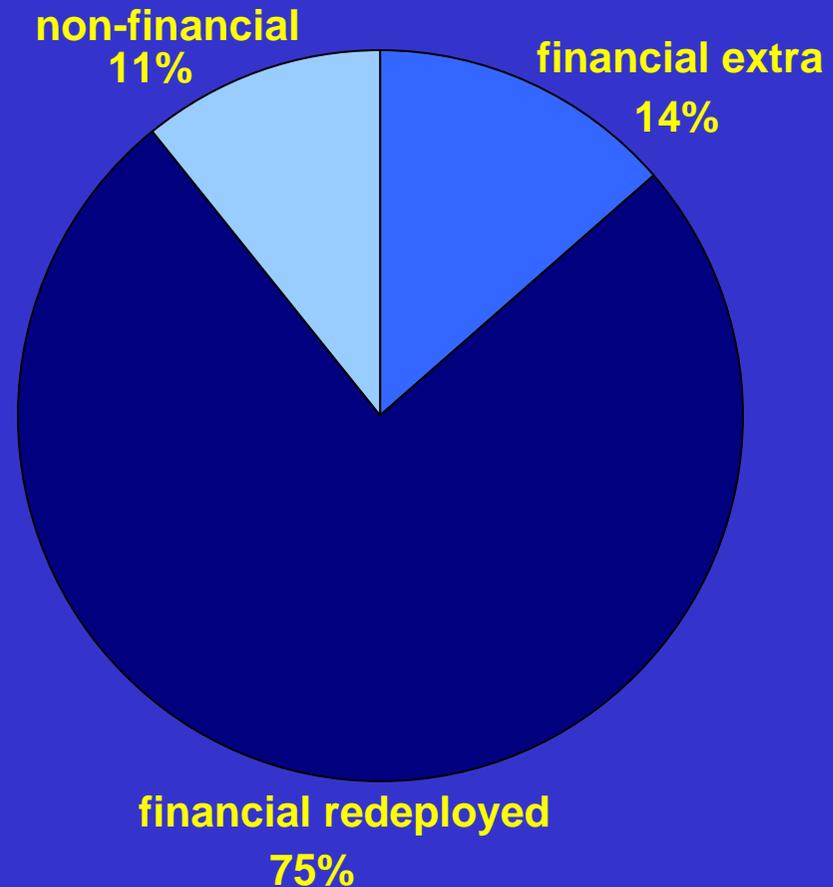


# Distribution of costs and benefits: financial versus economic impact

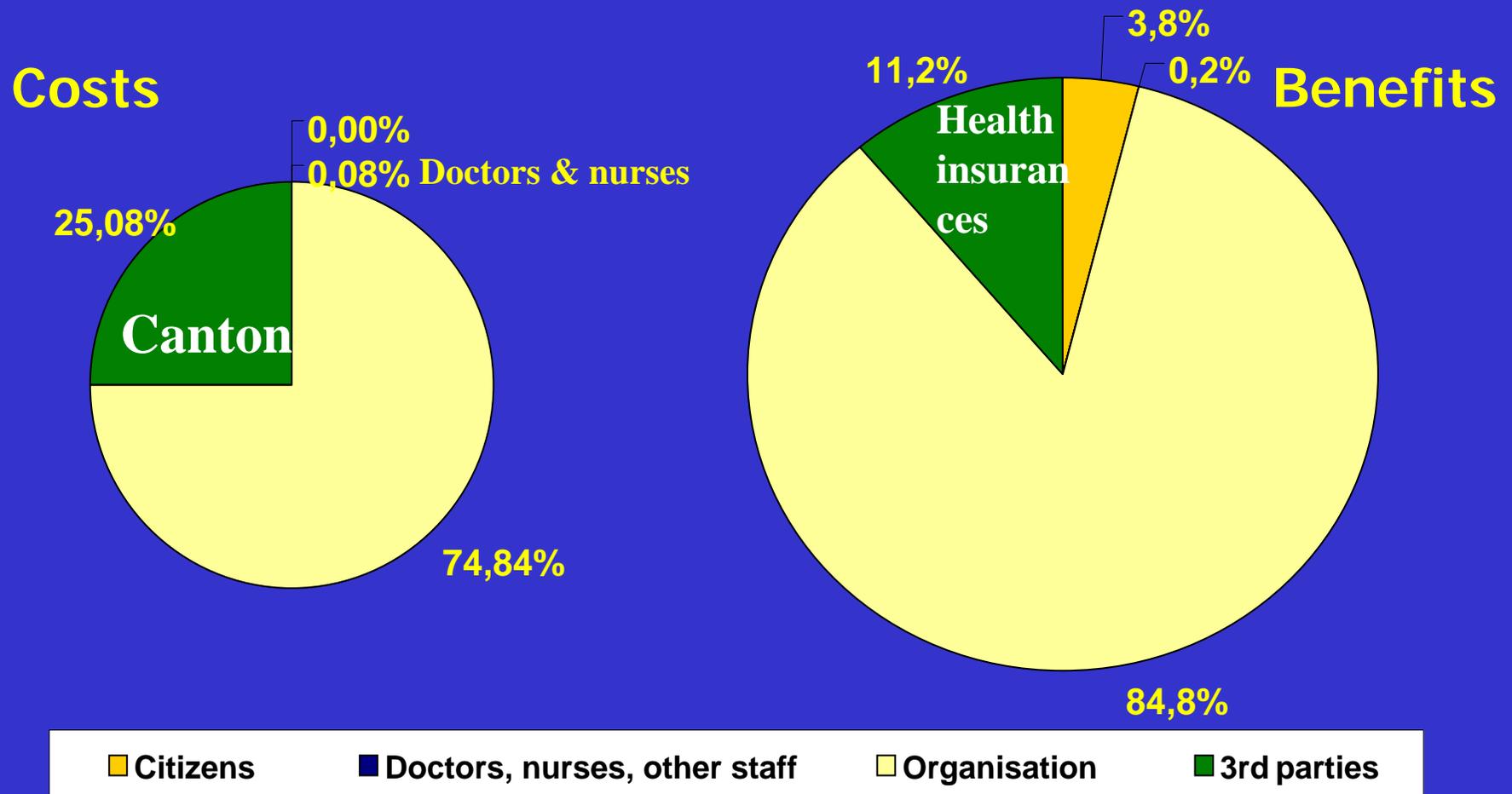
## Costs



## Benefits



# Distribution of costs and benefits: economic cases for all



# Lessons learnt

1. **Integrated eHealth in hospitals is worth it**
  - **But you need deep pockets & lots of patience!**
2. **Focus on benefit realisation, not on IT**
  - **But know what you can get: quality, not cash!**
3. **Benefits driven by integrating different systems into a comprehensive, EPR-centred HIS**
4. **Know what can go wrong!**
  - **Realistic change and risk management**

# Thank you for your attention!

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