



Realising economic returns from eHealth

findings from European studies illustrated by
the example of the University Hospitals of Geneva

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Overview

1. The EU EHR IMPACT study
2. HUG and the CPR system
3. Economic impact: some facts & figures
4. Comparisons & key issues for realising economic returns
5. 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.org)
 - Cost benefit analysis (CBA) from an economic perspective
 - All relevant costs and benefits for all stakeholders
 - Net *economic* gains

www.ehr-impact.eu

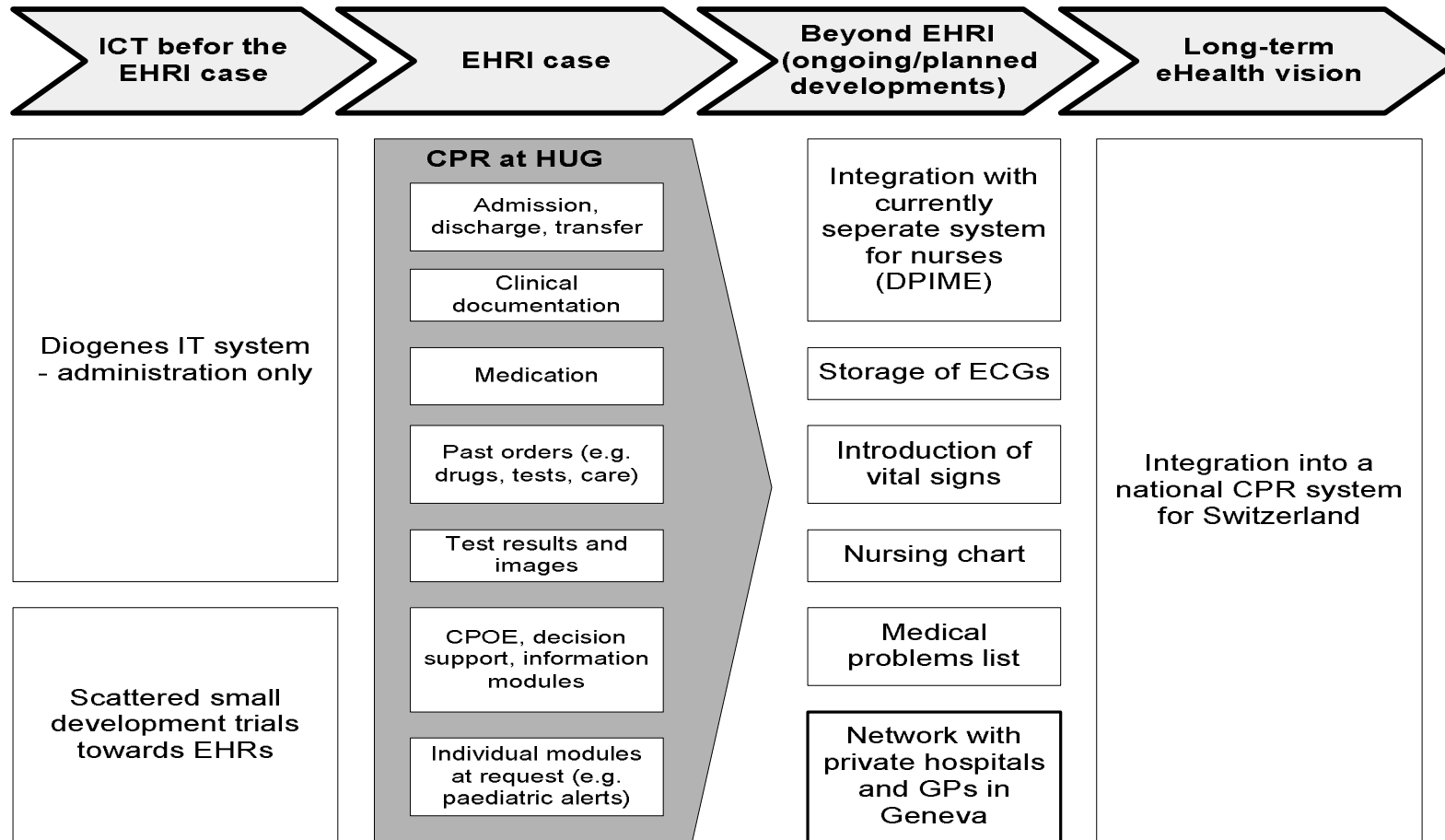
Economic returns from eHealth

1. You need **deep pockets & lots of patience !**
 - § up to ten years, 60 million CHF total for HUG
2. You need to **know what you can get !**
 - § quality, not cash
3. You need to **know what can go wrong !**
 - § realistic risk management

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
- § > 5'000 care professionals,
- § Annual budget of nearly 1.4bn CHF

About the Computerised Patient Record (CPR)



More details tomorrow 9:45am, Prof. Dr. med. Christian Lovis

Keynote on Clinical information, next Generation: Yes, but what is a CIS?

Costs and financing of the 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

- Patient safety
- Time saving and avoided admissions
- Better care because of better informed carers

§ Doctors & nurses

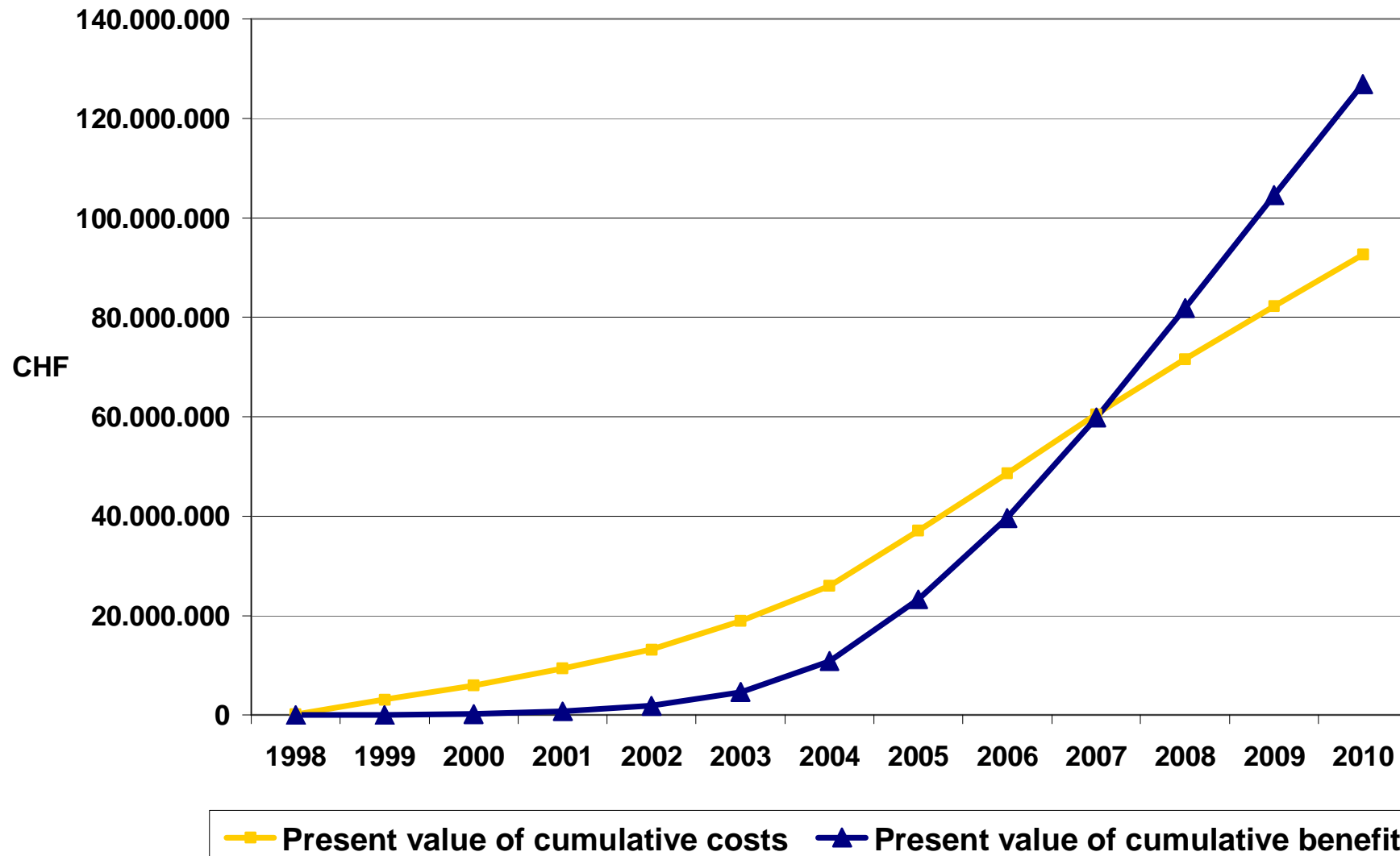
- Do not have to waste time looking for records
- Lower exposure to risk – carers feel safer, less vulnerable
- Nurses do not have to chase doctors
- Doctors do not have to guess while waiting for data
- Life made easier through integrated presentation of different reports

Benefits from the CPR system at HUG

§ Benefits to HUG

- Time savings – redeployment of resources:
 - Looking for records
 - Looking for colleagues
 - *Ward rounds*
 - 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
- Avoided admissions – **also for insurances**
- Reductions in number of tests
- Extra income from better billing processes

HUG – cumulative *economic* performance



Preliminary data

The economic and financial sides of sustainability

§ The economic view

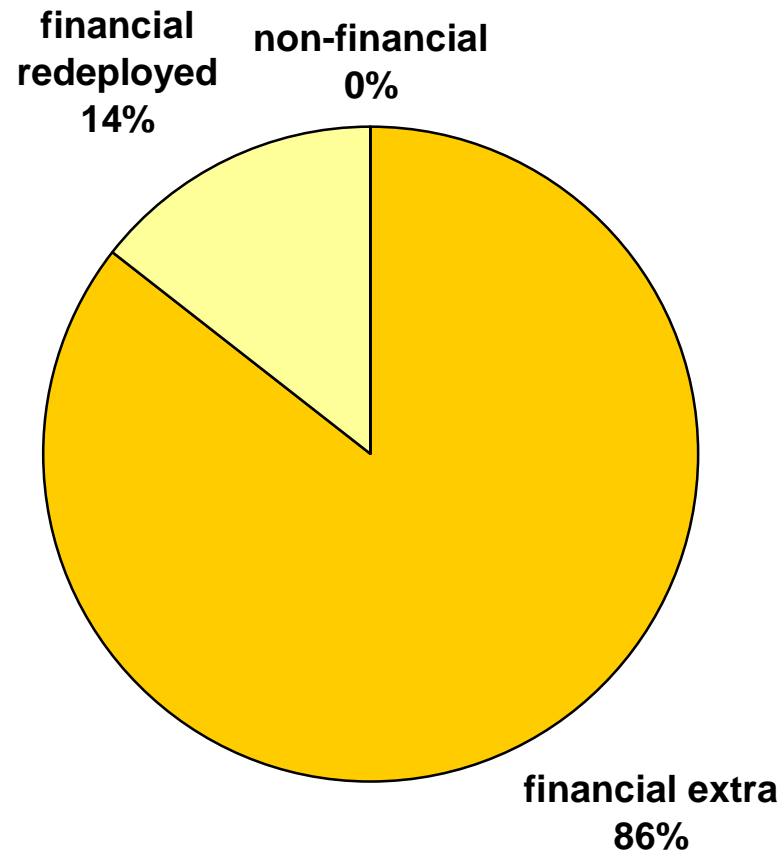
- all stakeholders
- tangible and intangible cost and benefits
- realising social NET benefits over time
- policy goals

§ Financial aspects

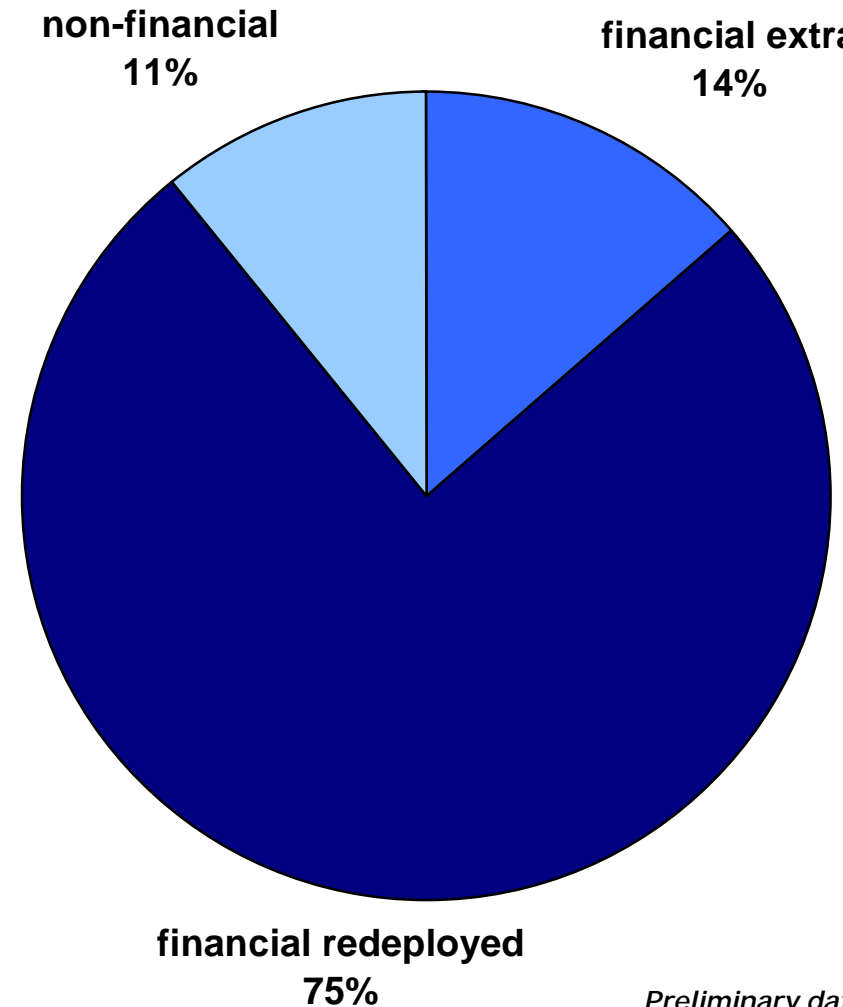
- each one, or a small number of organisations
- financial impact over time for that organisation
- private net benefits, managing risk
- strategic behaviour – the competition game

Distribution of costs and benefits: financial versus economic impact

Costs



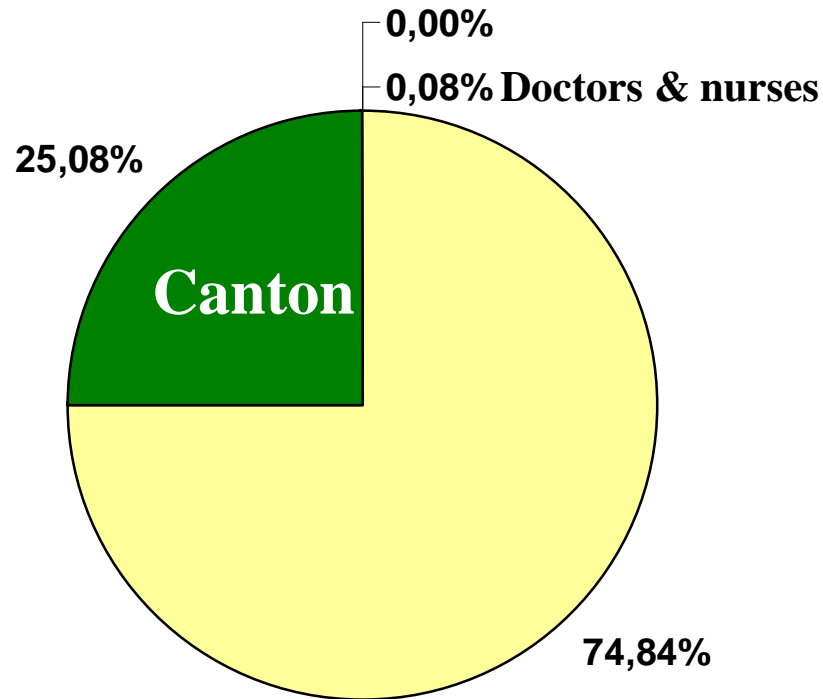
Benefits



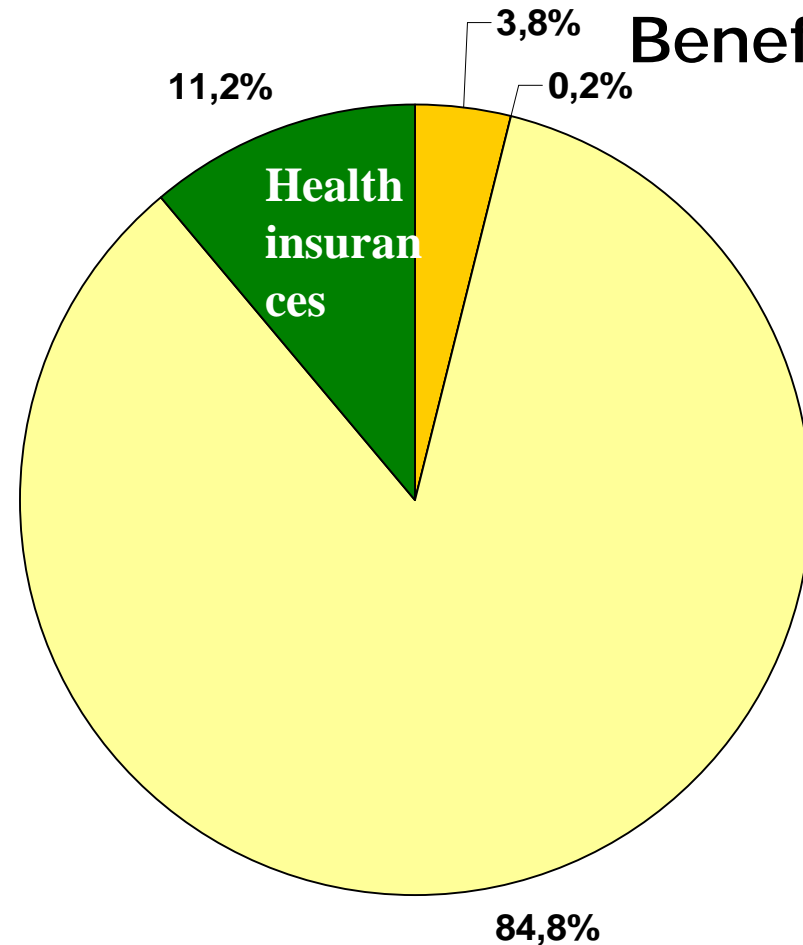
Preliminary data

Distribution of costs and benefits: business cases for all

Costs



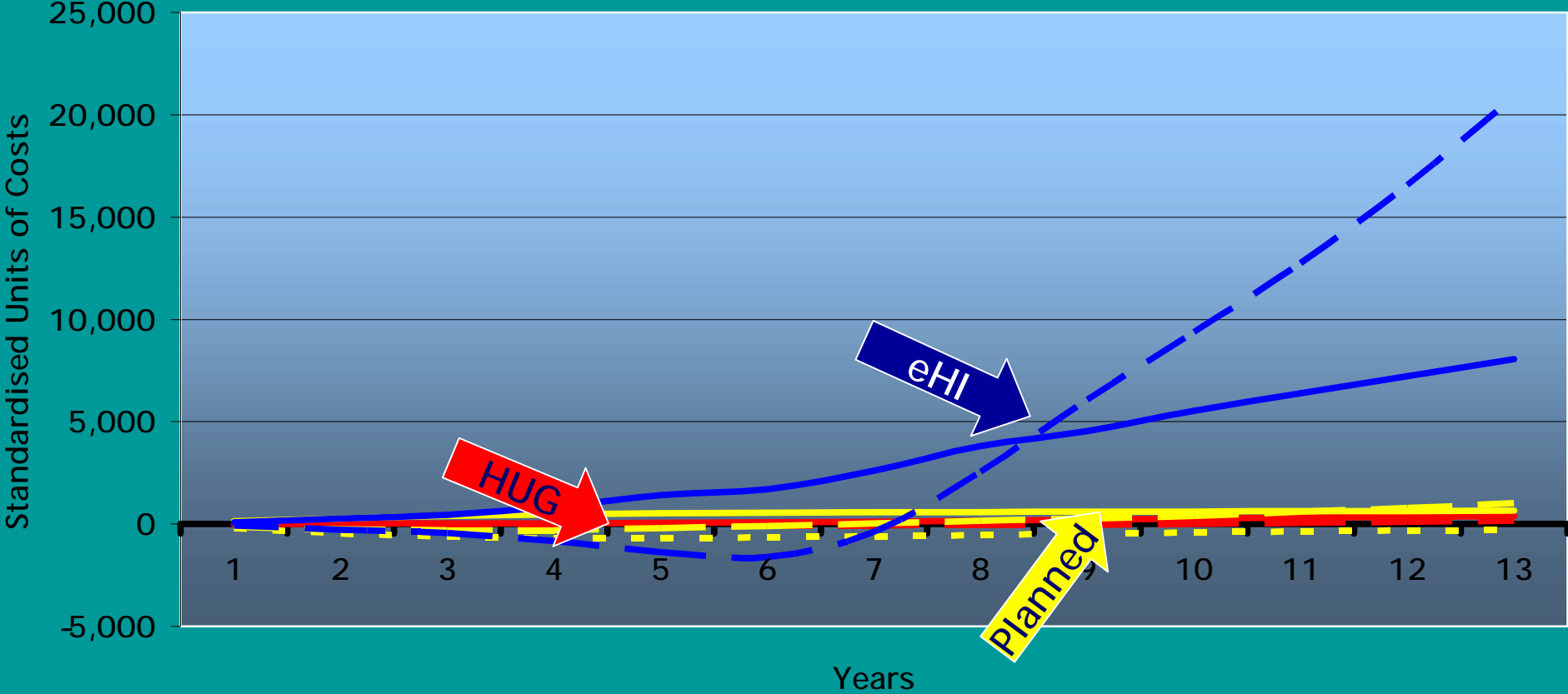
Benefits



Preliminary data

eHealth Investment Decisions – HUG Comparisons

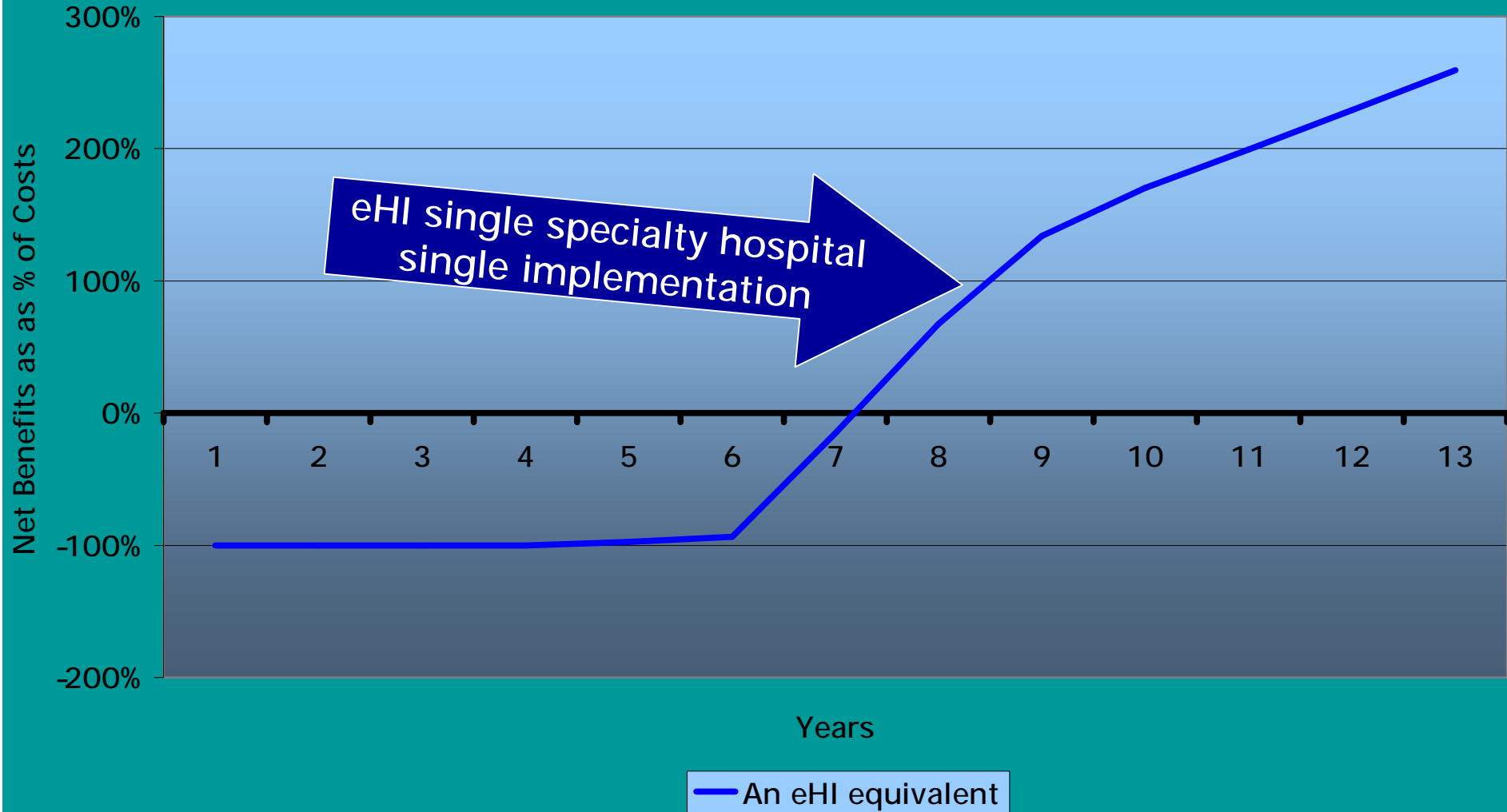
Comparison of HUG eHealth Performance with Others



- HUG costs
- HUG net benefit
- Another costs
- Another net benefit
- Another adjusted for risk
- eHI equivalent net benefit
- eHI equivalent costs

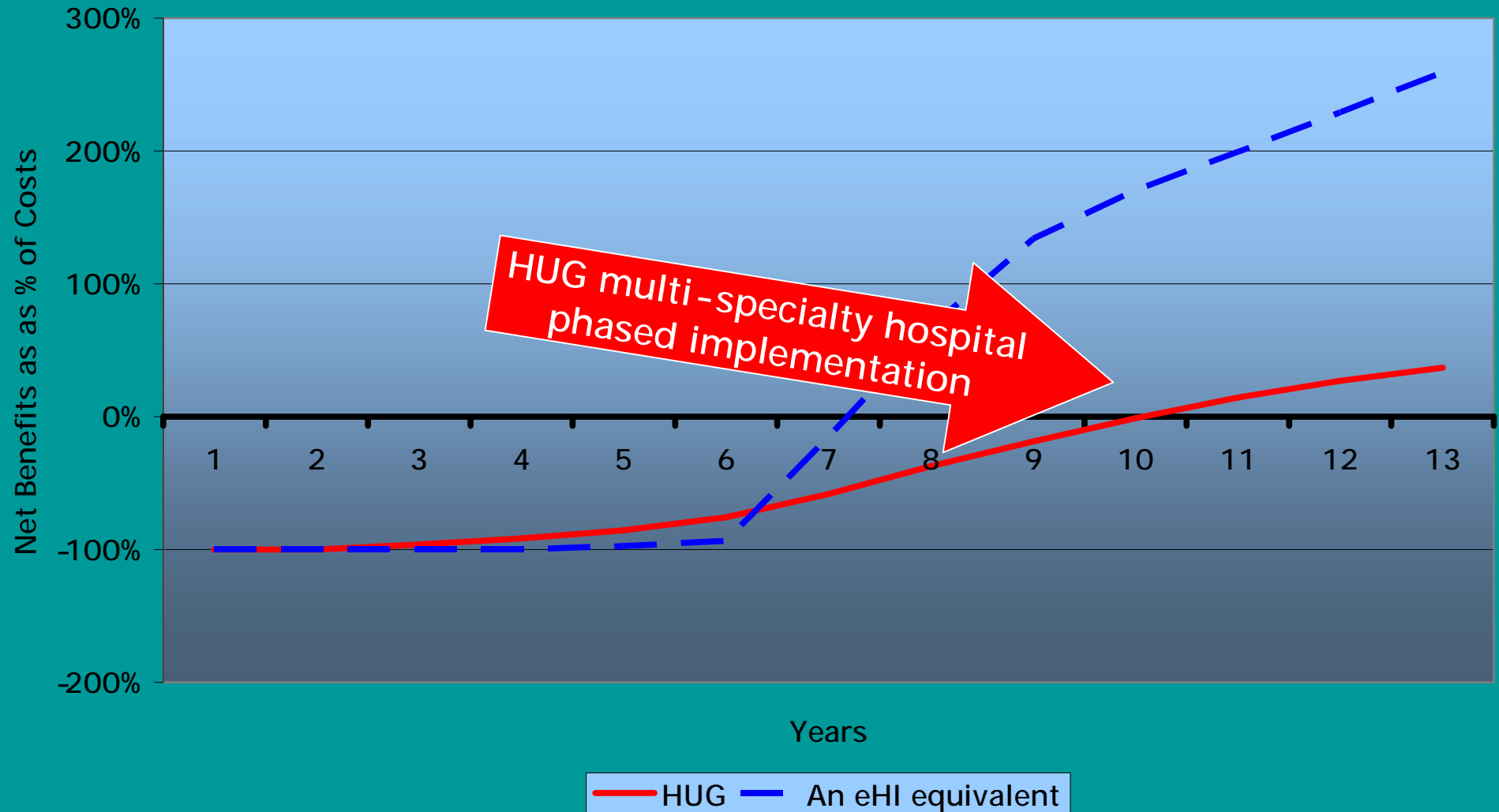
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Comparison of HUG Cumulative Economic Return with Others



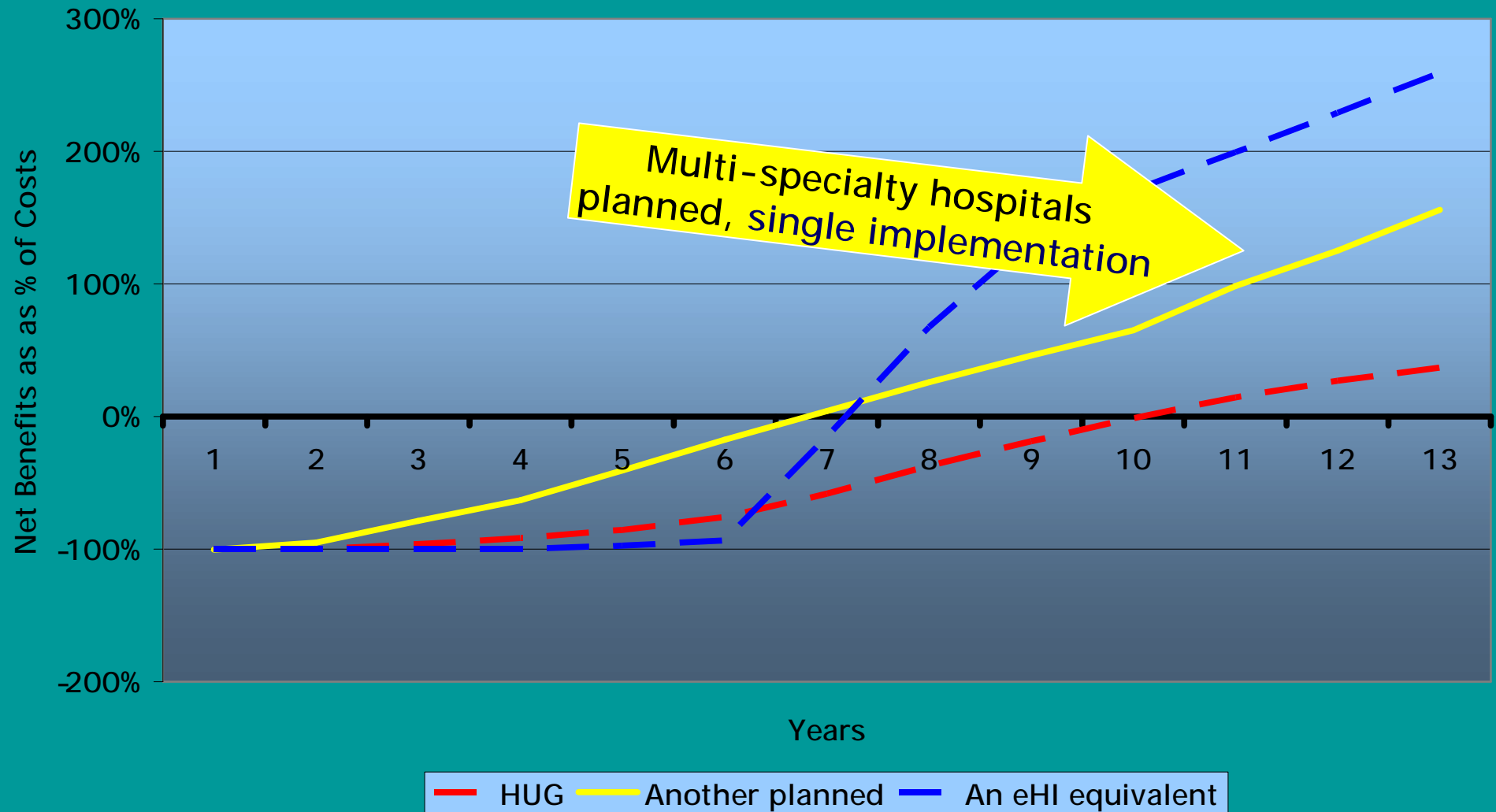
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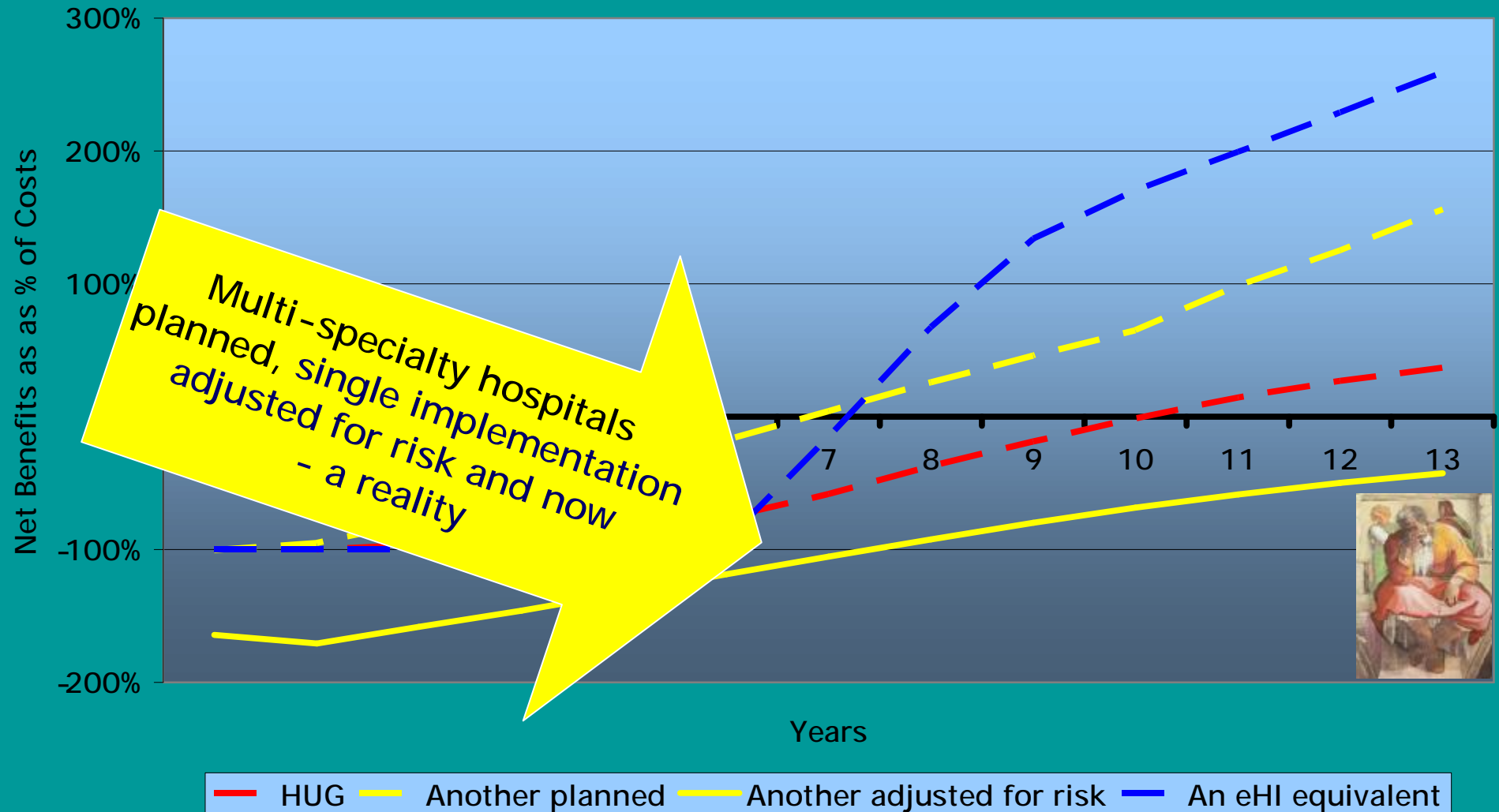
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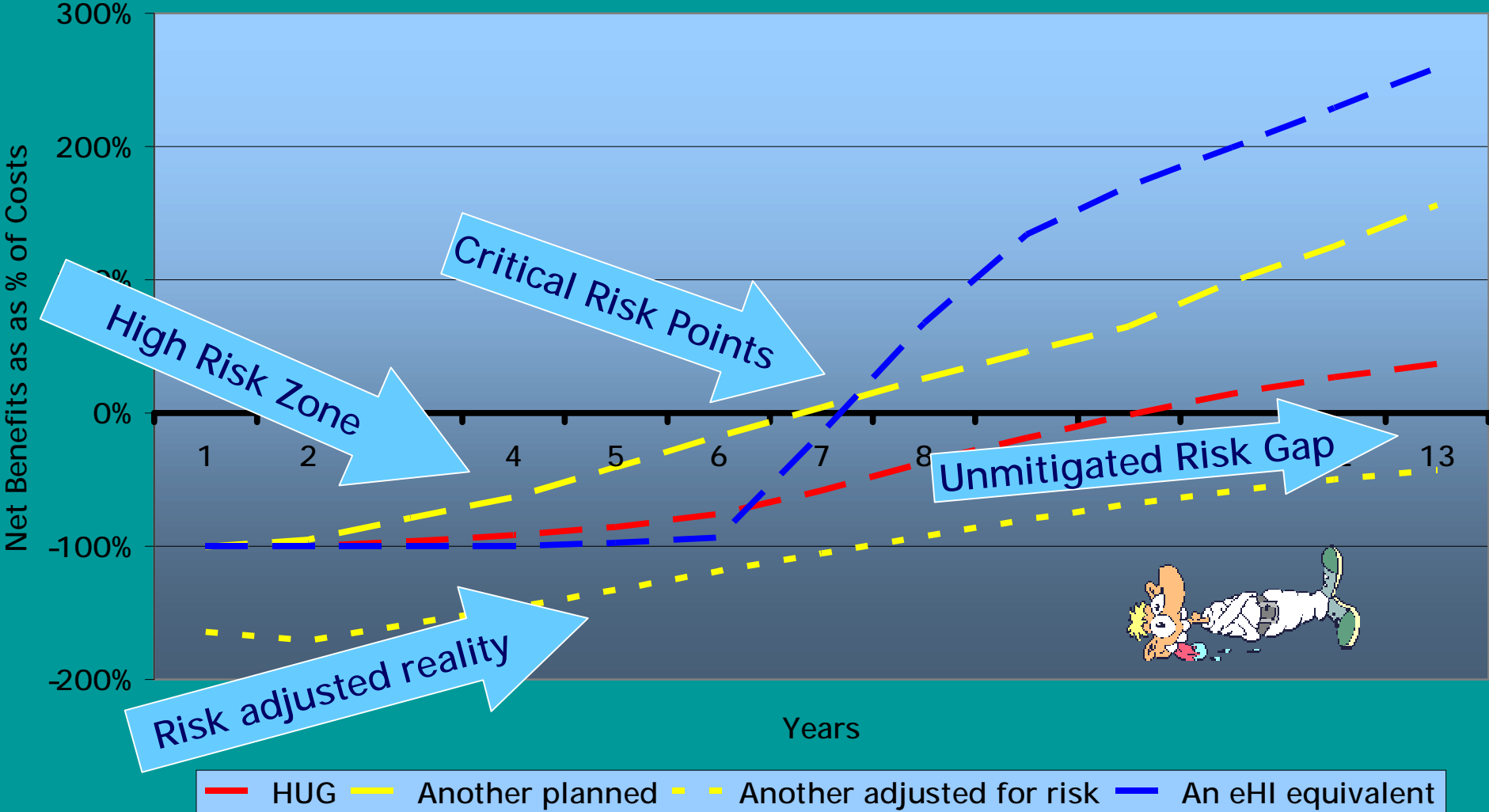
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eHealth Investment Decisions – HUG Comparisons

Comparison of HUG Cumulative Economic Return with Others



eHealth Investment Decisions – HUG Comparisons

How much does risk cost if it's not
mitigated?

0.4% to 2% of revenue each year

Making eHealth investments a success

- § Economic **sustainability**
 - Optimal **costs / benefits** relationship **over time**
- § Sustainable **financing**
- § **Business cases** for all stakeholders!
- § Management of all financial returns – eHealth generates **little extra cash!**
- § Effective **risk management & mitigation**

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Thank you for your attention!

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