



Institute of Medical
Biometry and Informatics
Dep. of Medical Informatics

UniversityHospital Heidelberg

Archetype-based Information Systems for Integrating Clinical Care and Research Data

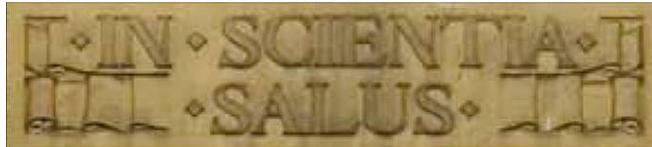
Dr. Christian Kohl



Kyoto 2013



Introduction



- Clinical trials are of high importance for medical research and progress.

Problem:

- Data collection in trials is a time consuming and expensive task.

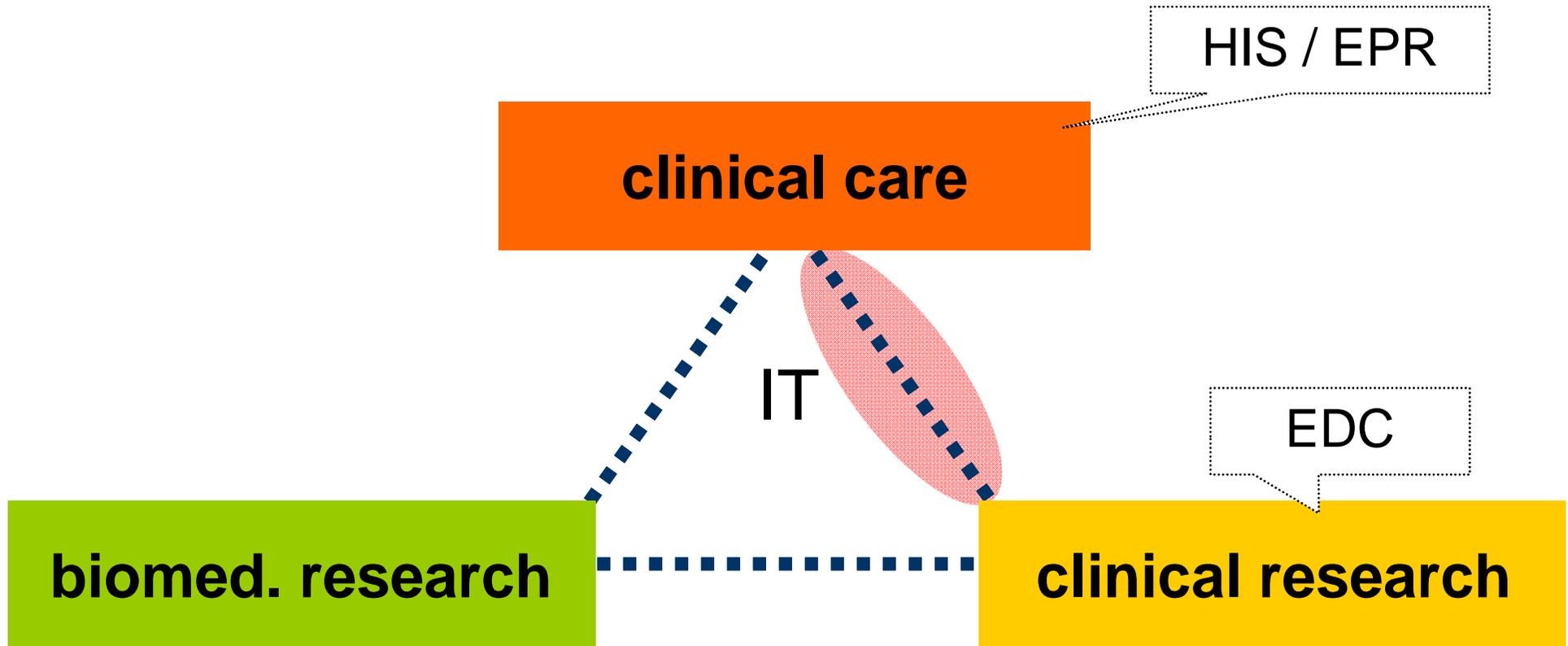


Introduction





Current Situation





Intended Situation

HIS / EPR

clinical care

Possibilities:

Reuse of data from clinical routine care for...

- identification of potential trial participants,
- feasibility studies,
- **clinical trials.**

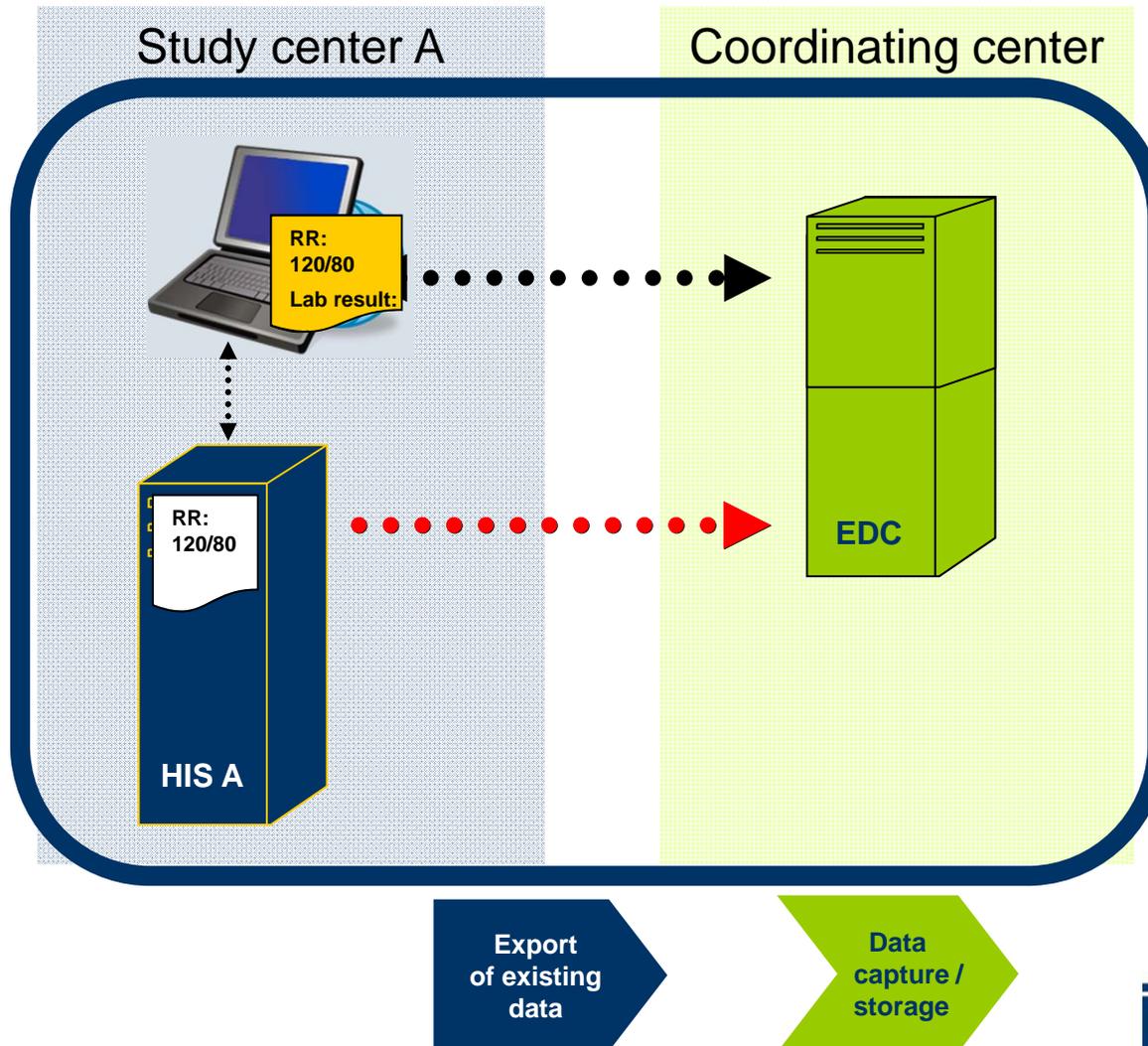
IT

EDC

clinical research



Intended Situation

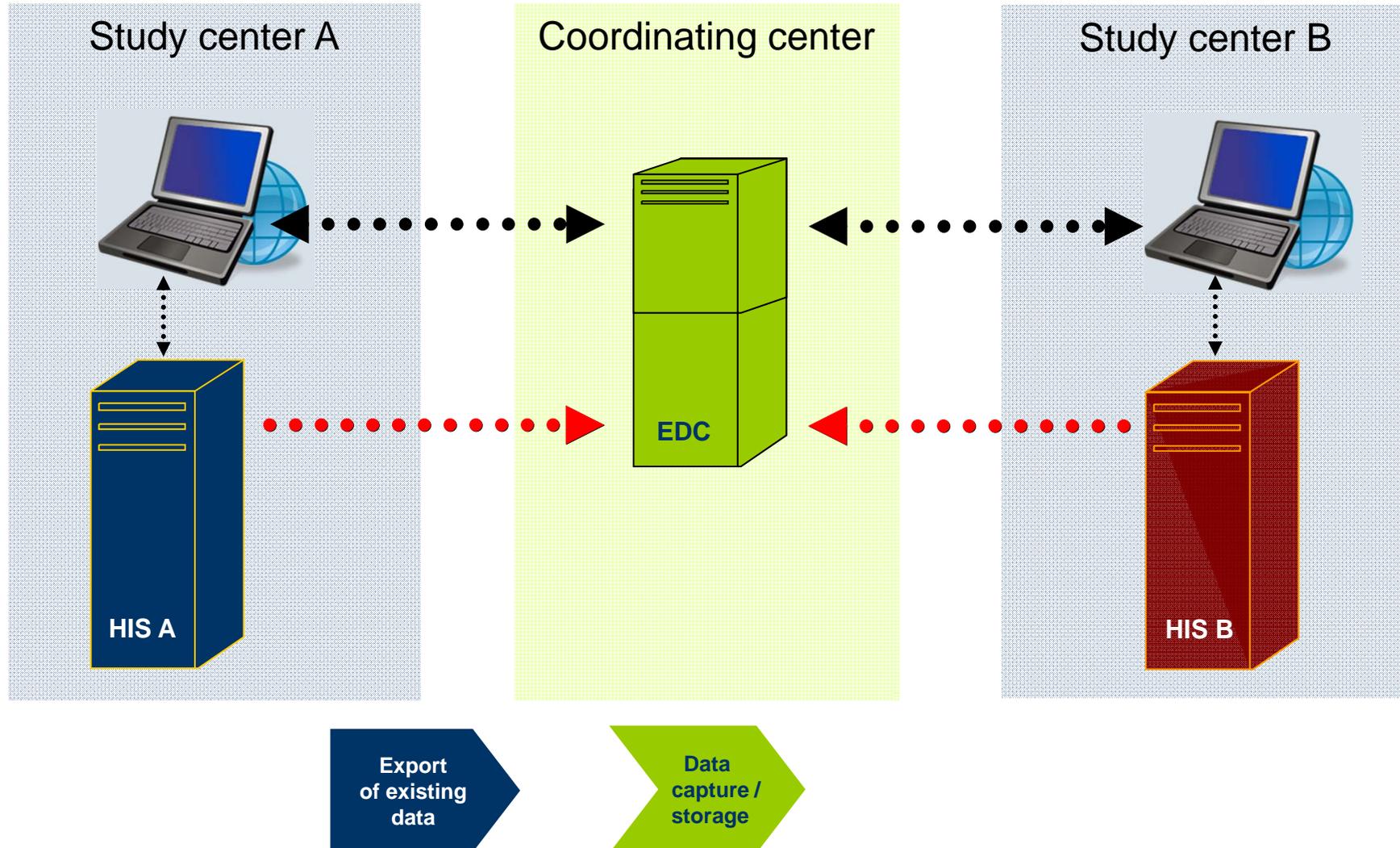


Problems

- different standards
- different levels of data quality
- legal and ethical requirements
- different names for the same data-items
- the same names for different data items

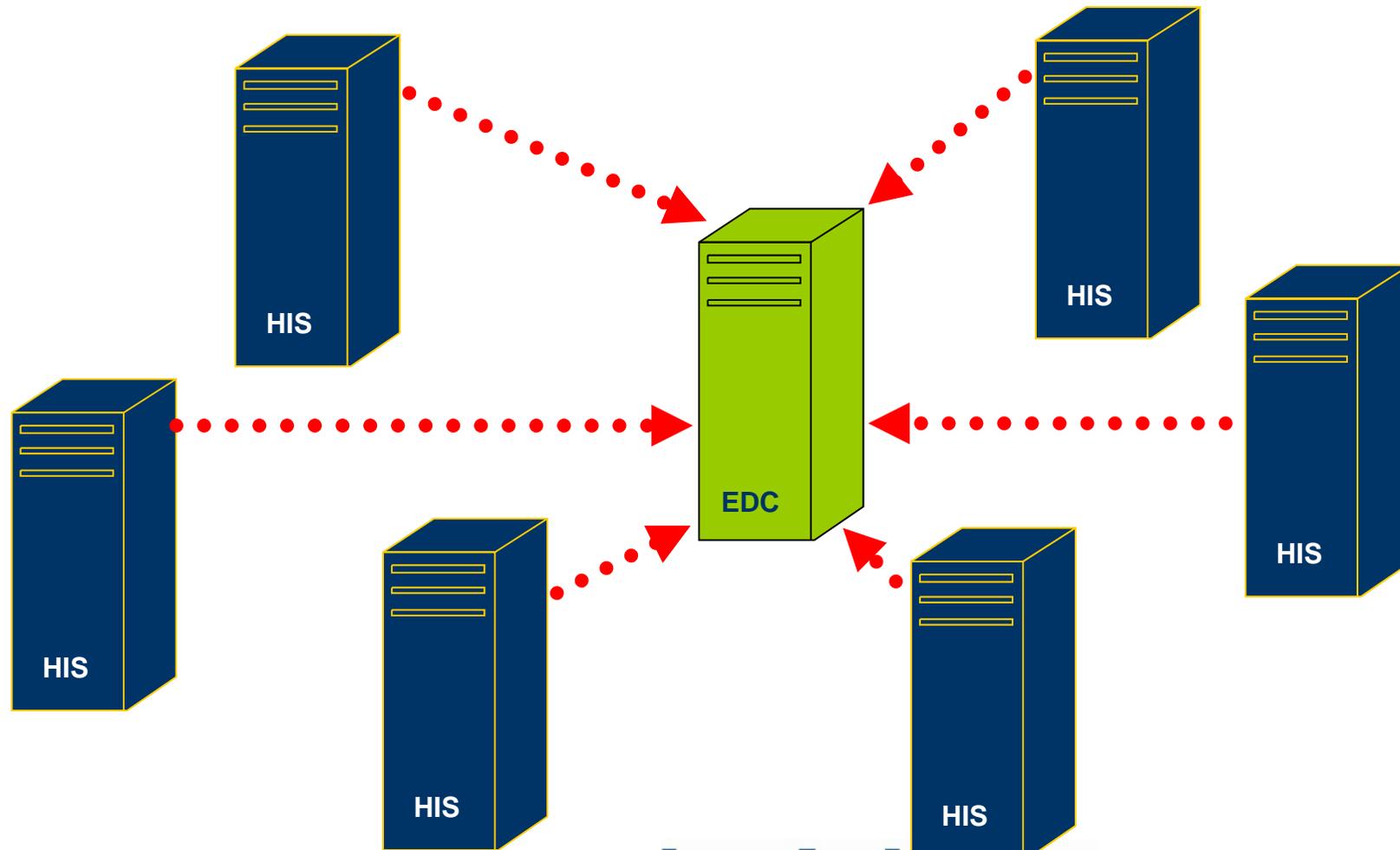


Challenge: Multicenter Trials



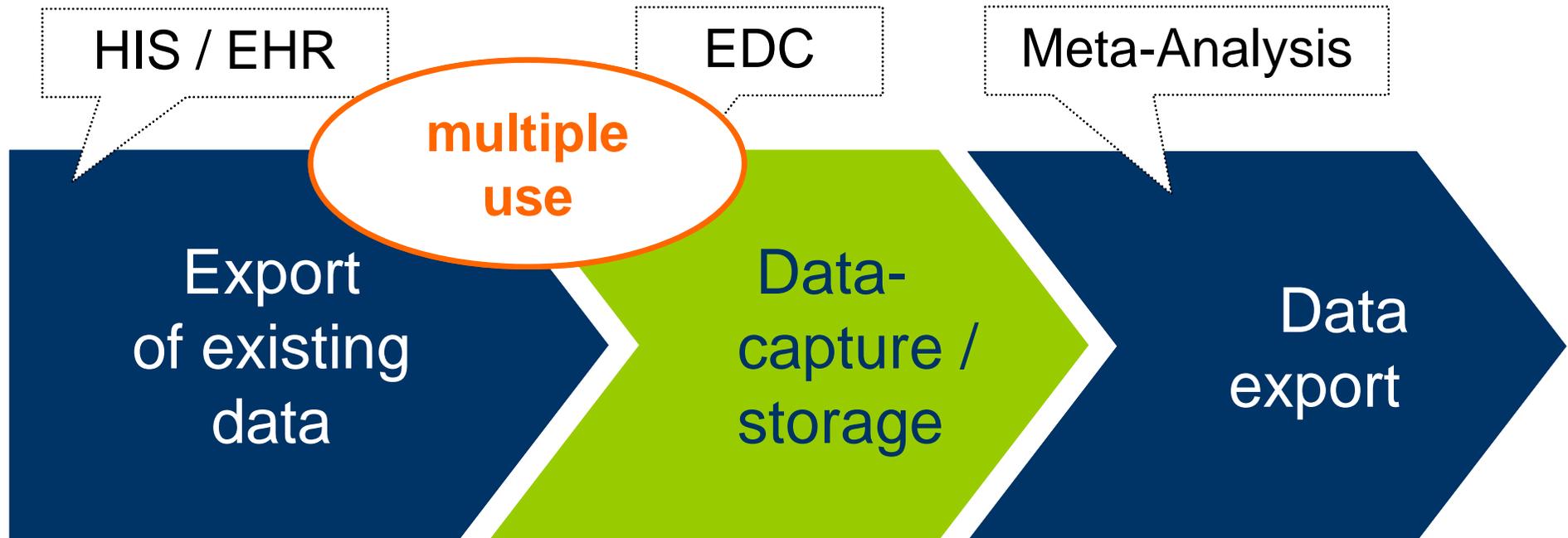


Challenge: Multicenter Trials





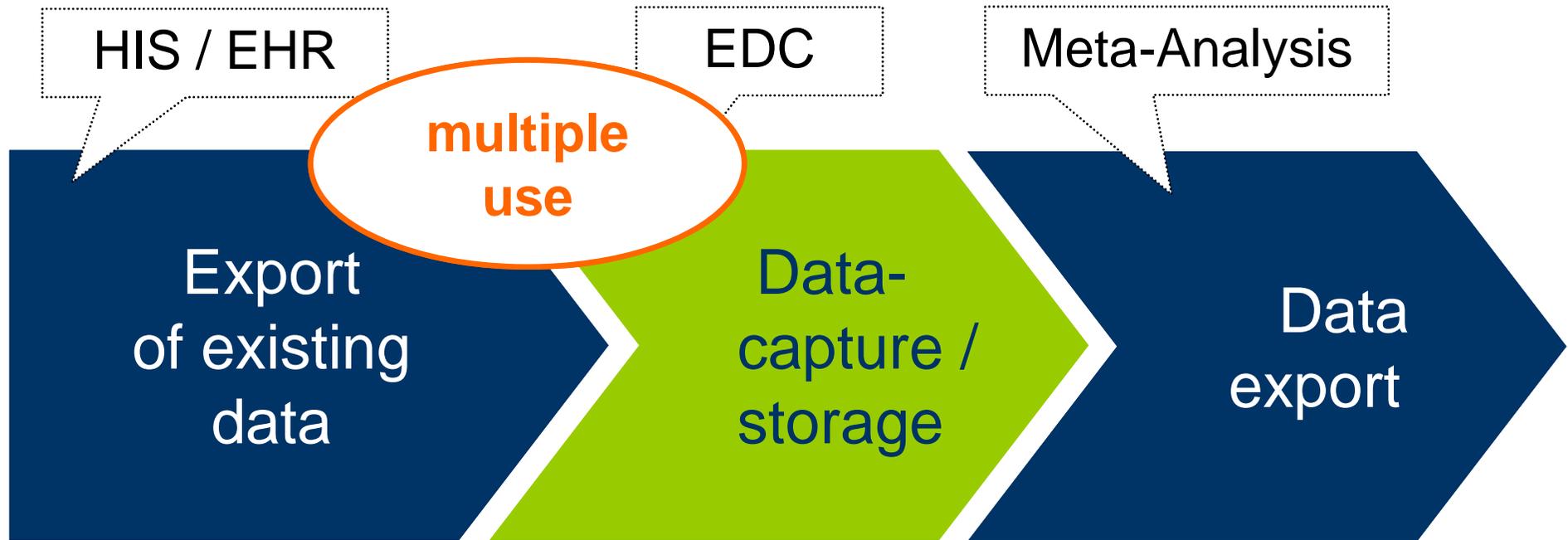
Possible Solution (1)



**Meta-Data
Repository**



Possible Solution (2)

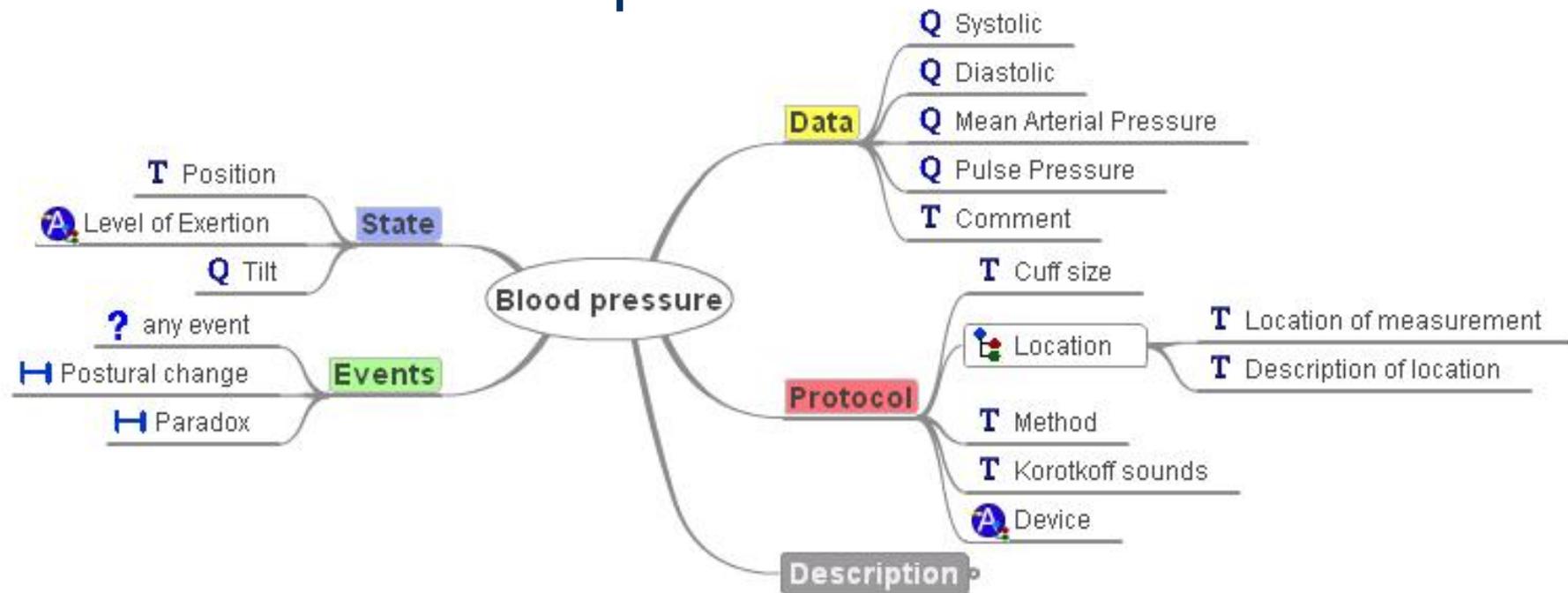


Archetype based approach



openEHR Archetypes

- Reusable information models of clinical concepts.





openEHR Archetypes

- Reusable information models of clinical concepts.

*syntactic and semantic
interoperability*



Trial Data Set

Trial

Meta-Data

- research question
- inclusion / exclusion criteria

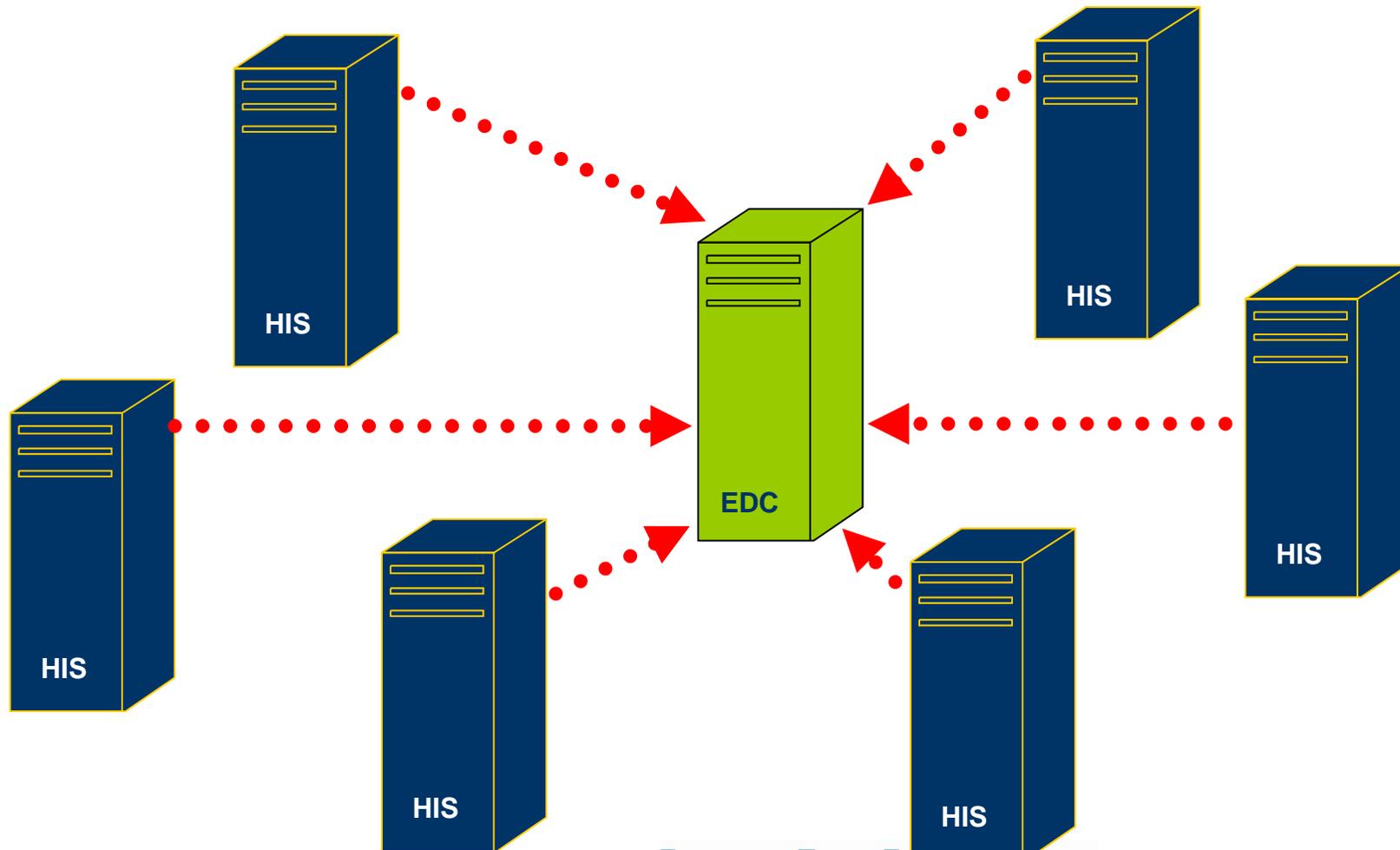
Patient-Data

- sex
- age
- blood pressure ...

**EHR
archetypes**

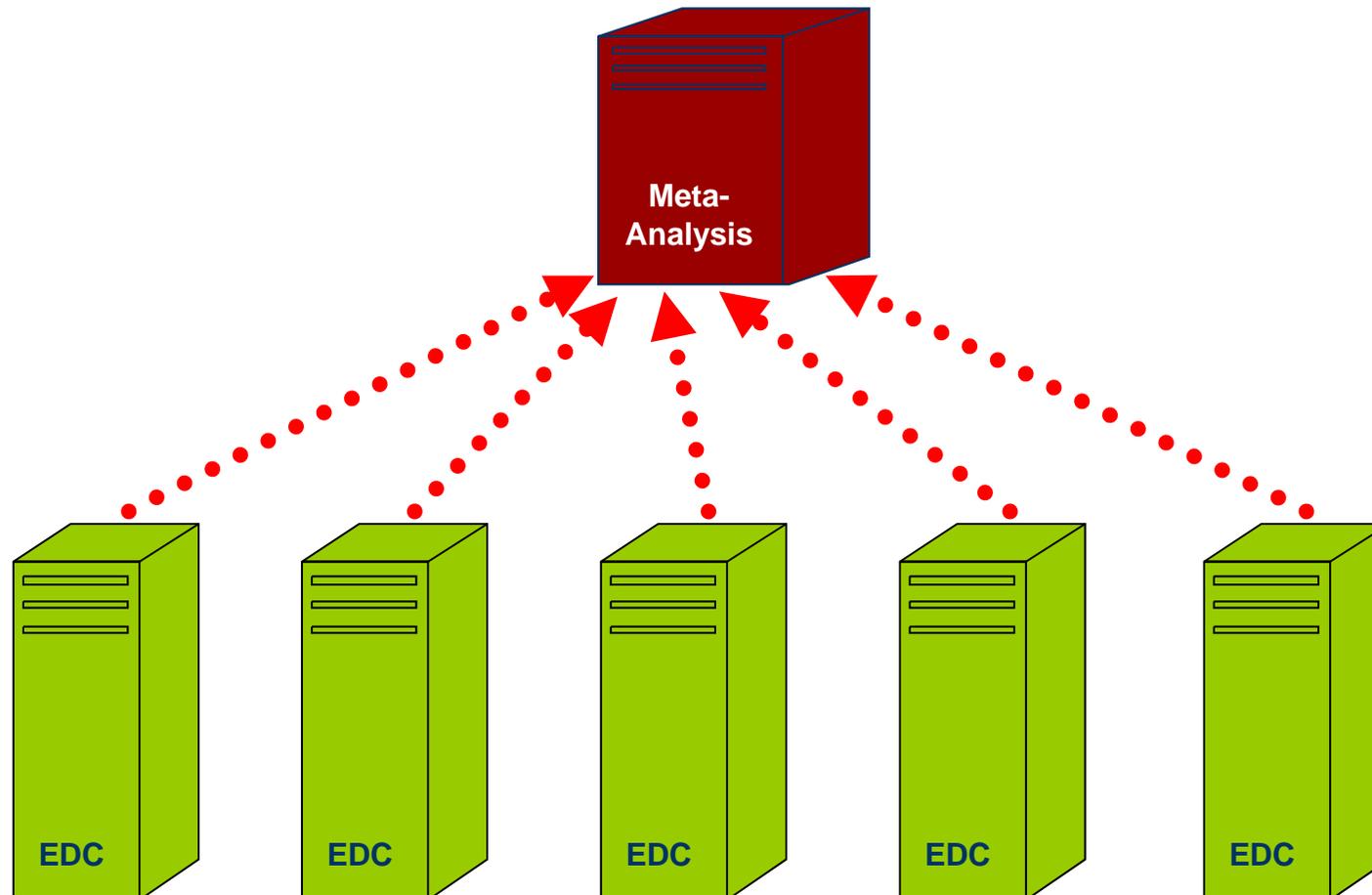


Conclusion and Perspective





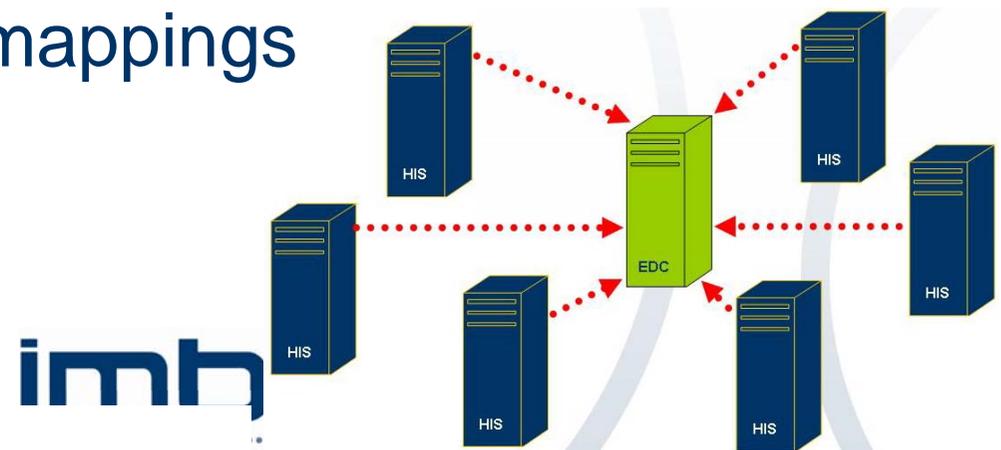
Perspective





Conclusion

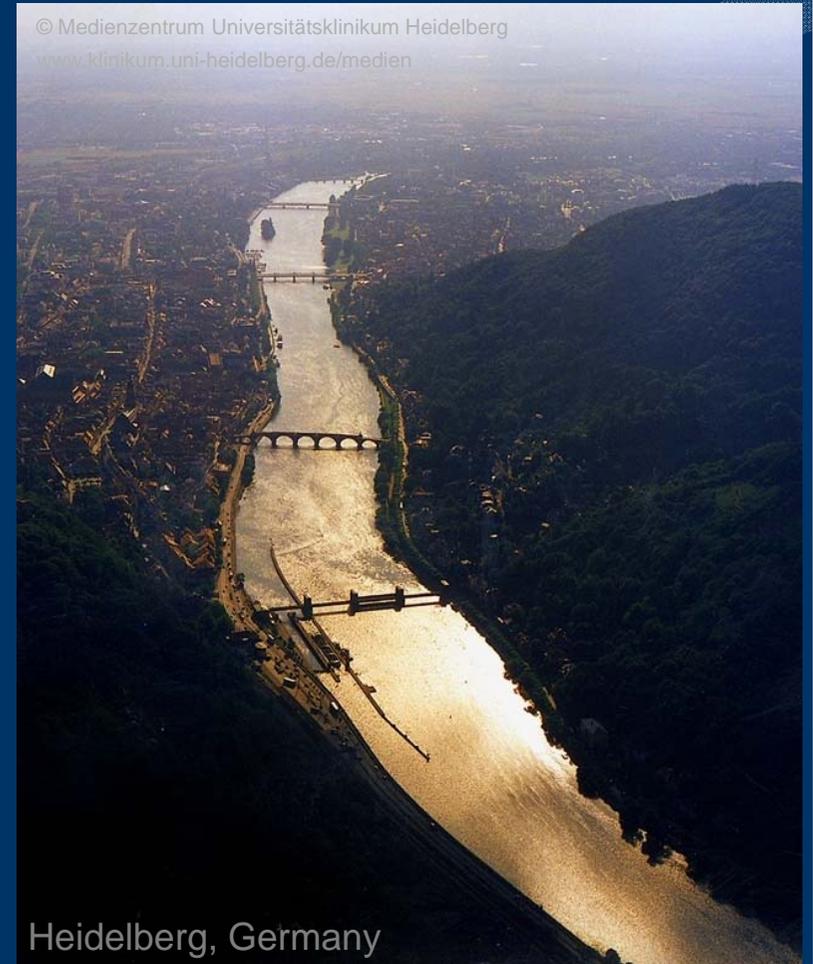
- Benefits of using archetypes in EDC systems for clinical trials...
 - ...integration of existing data sets (archetype based and non archetype-based)
 - ...multiple use of mappings
 - ...meta analysis.





Thank you!

© Medienzentrum Universitätsklinikum Heidelberg
www.klinikum.uni-heidelberg.de/medien



Heidelberg, Germany

