

# Germany's Medical Informatics Initiative - experiences from the SMITH consortium in Thuringia

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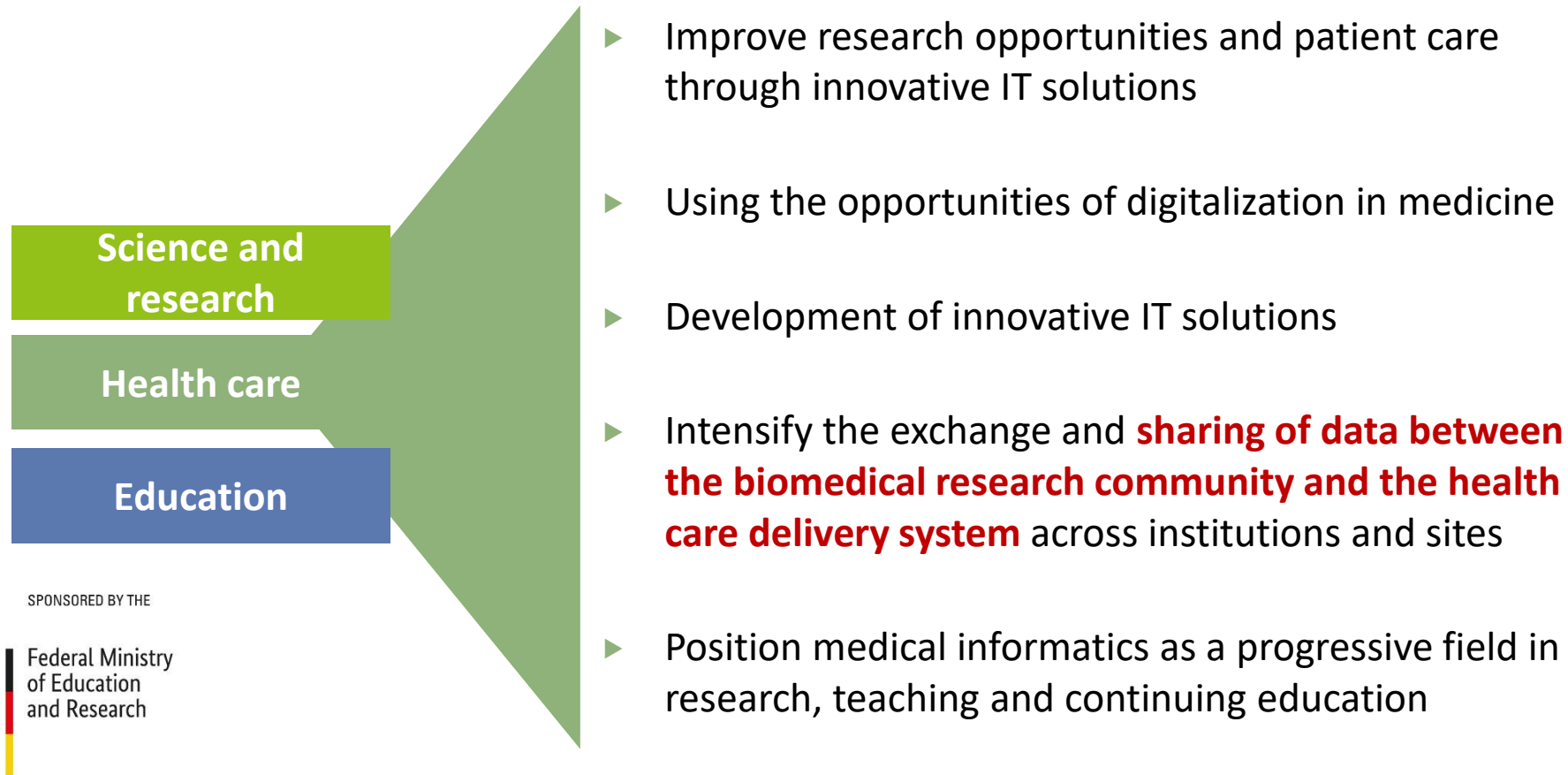
# Outline

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- ▶ Germanys Medical Informatics Initiative (MII)
- ▶ SMITH consortium
- ▶ Outlook/Questions towards the EU level

# Medical Informatics Initiative: Aims (from the BMBF funding concept)



# Consortia and participants in the current funding phase

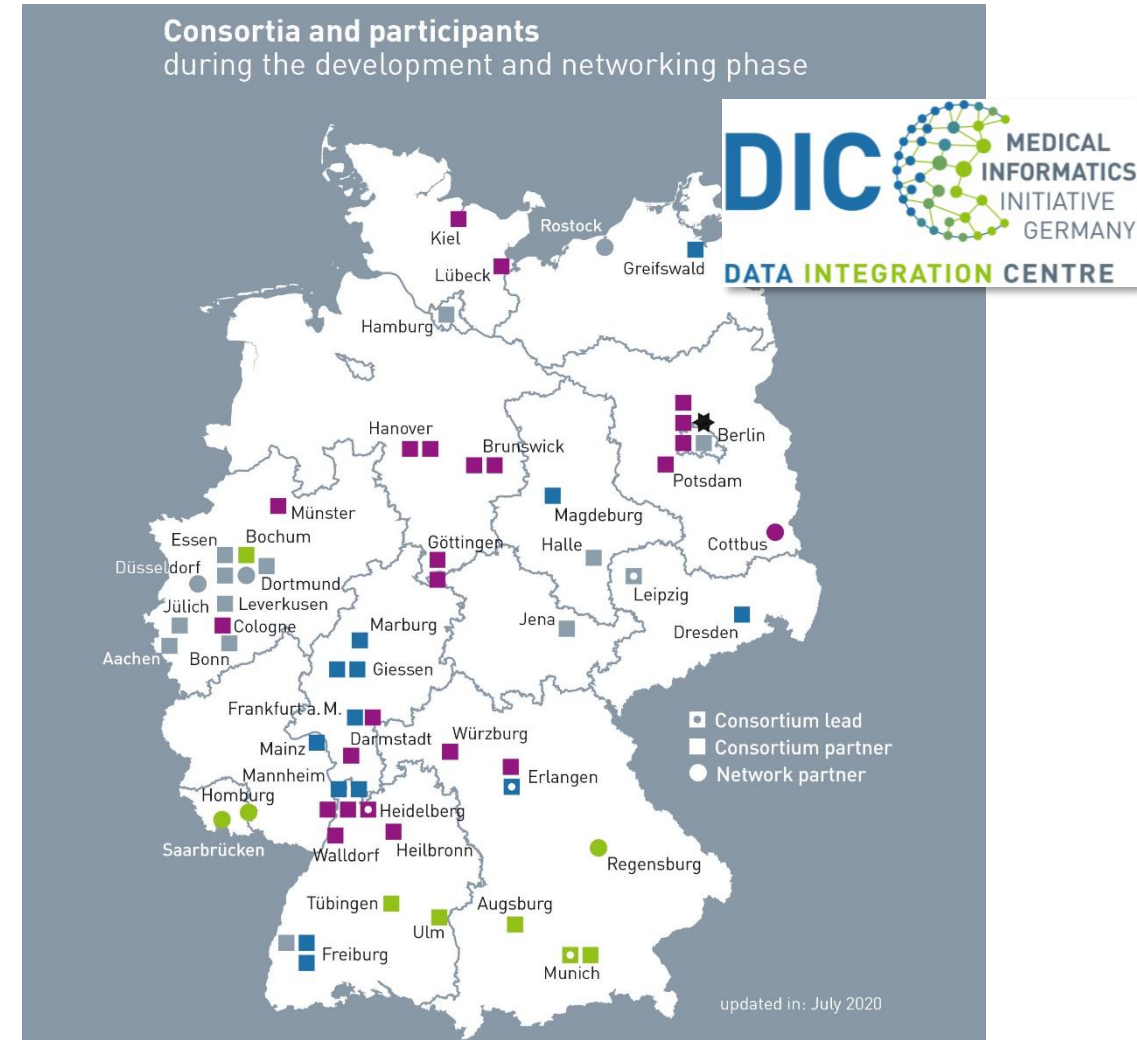
- 4 consortia



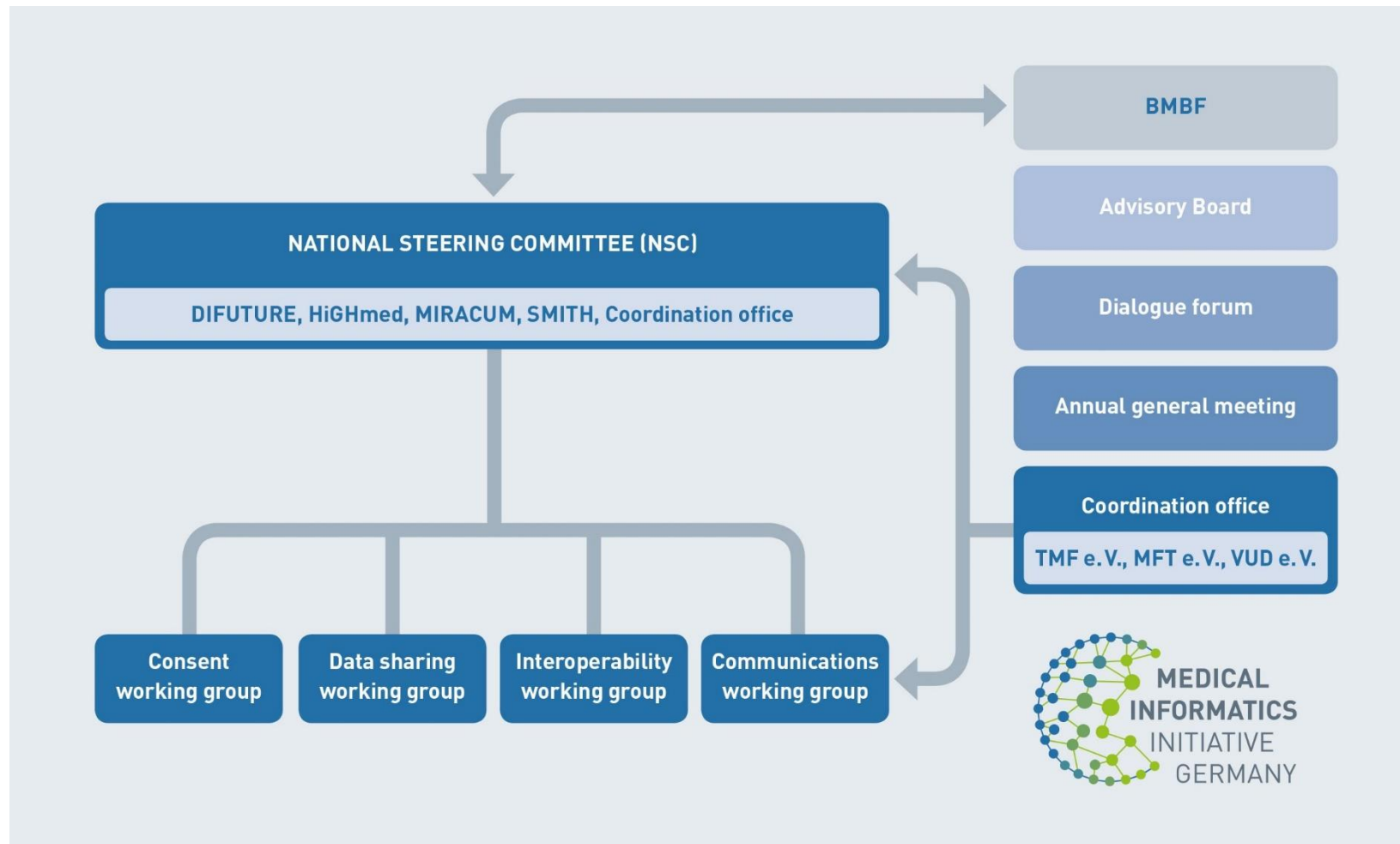
- + coordination office



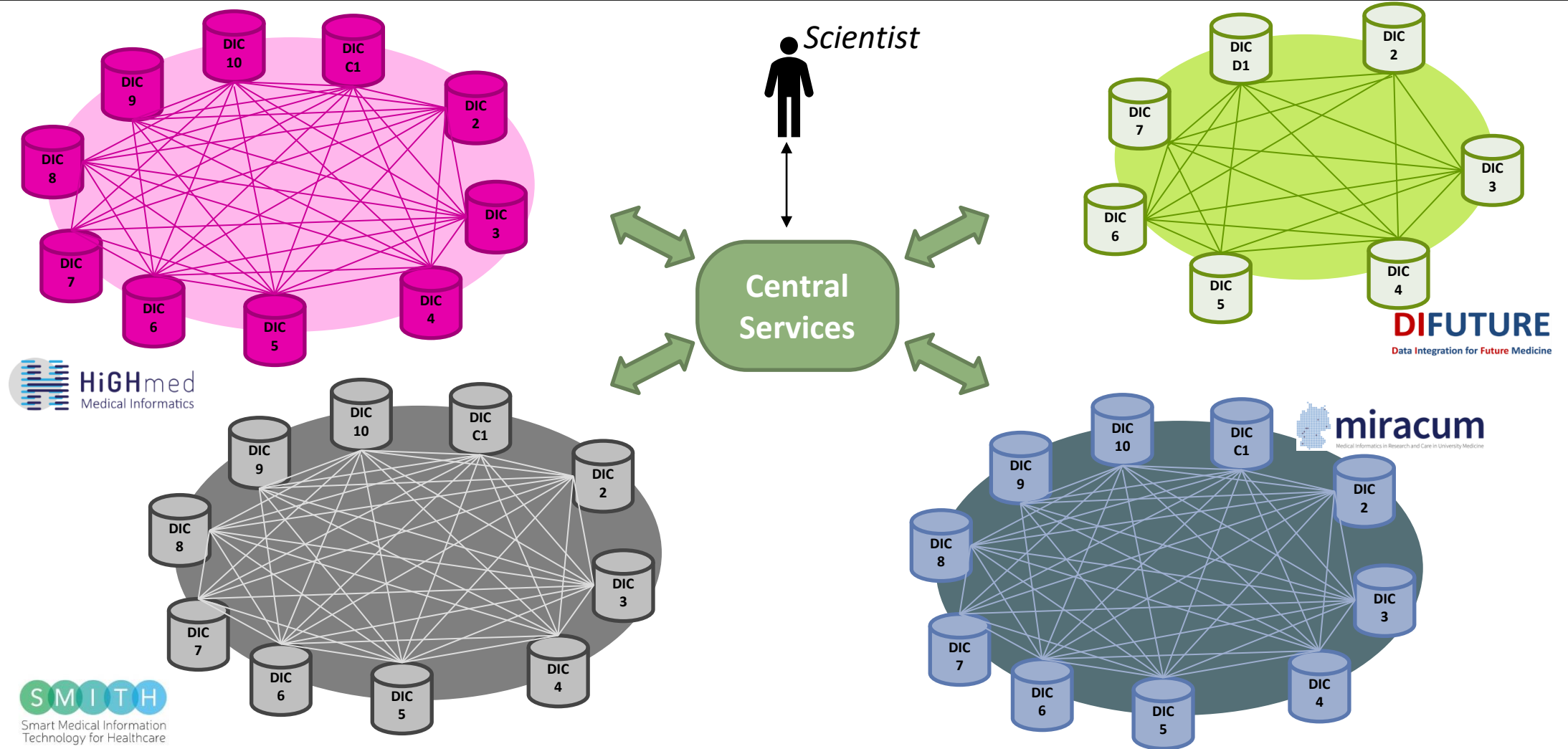
- 36 university hospital sites
- with 29 data integration centers



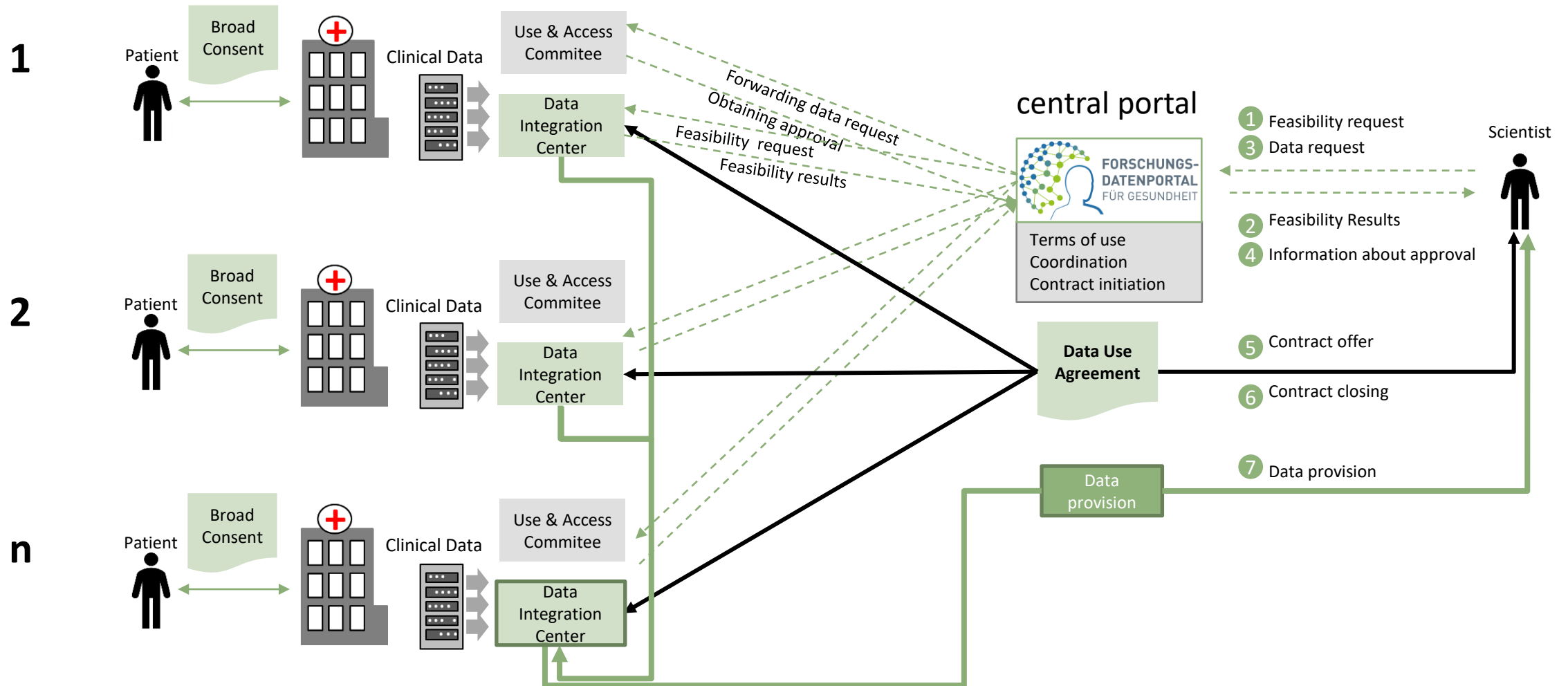
# Project structure



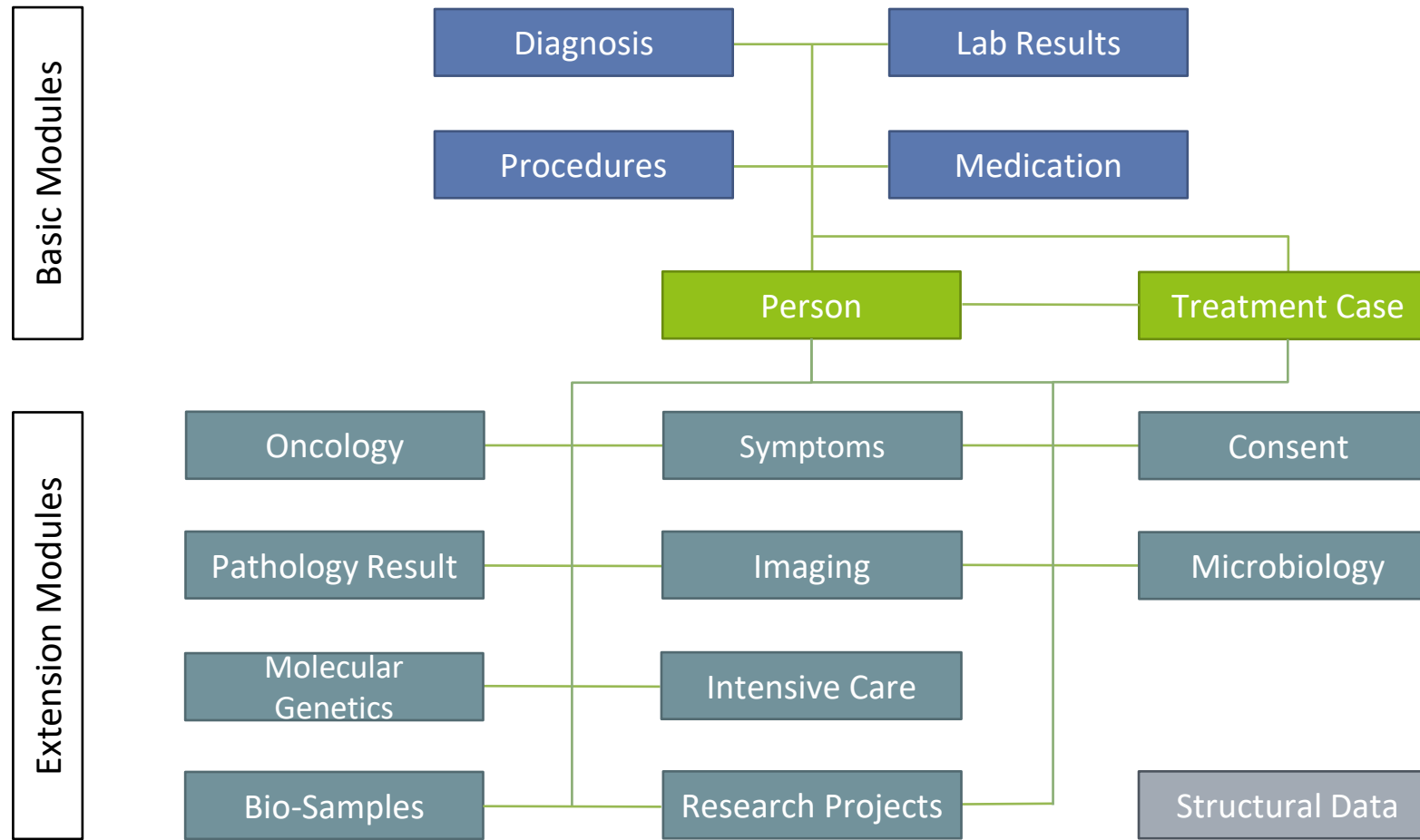
# Federated data management - nationwide uniform data use



# Federated data management – technical view



# MII core data set of clinical patient care documentation



**LOINC**

**SNOMED CT**

**HL7<sup>®</sup> FHIR<sup>®</sup>**



# SMITH consortium



# SMITH consortium



- ▶ 19 partners from science **and industry**
- ▶ 10 German university hospitals
- ▶ 3 additional university hospitals (network partners)



# SMITH consortium – Use Cases



## HELP

EMR-based clinical decision support system to improve outcomes of bloodstream infections

*App-based Intervention*

*Clinical trial: N > 4200*



## ASIC

Algorithmic Surveillance of ICU patients to improve personalized management of care

*App-based intervention*

*Clinical trial: N > 10.300*

## PheP

Phenotype Pipeline, Algorithms for extracting phenotypes from EMR data

*Ontological modelling of classifiers (AE, phenotypes) and NLP data extraction*



## SMITH consortium – Education

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- ▶ 4 New Chairs for Medical Informatics
- ▶ 4 Junior Research Groups
- ▶ 4 New M. Sc. curricula (one postgraduate)
- ▶ additional activities regarding non-academic and academic training (e.g. for medical students)

## Outlook/Questions towards the EU level

- ▶ MII is by now not well integrated at the EU level
- ▶ Impact of both General Data Protection Regulation and Medical Device Regulation
- ▶ “Do not reinvent the wheel!”
- ▶ a more sustainable funding scheme is needed
- ▶ Manufacturers (and their devices) have to support interoperability standards (and their updates) and this cannot be judged by them
- ▶ What are the needs of manufacturer and what are the needs of our patients (how to better involve them)?



# Thank you for your attention!



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