

# A smart framework for a responsible and efficient secondary use of health data

## SPHN | Swiss Personalized Health Network

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Managing Director

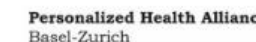
OncoSuisse Forum «Data and Registries»

A project of

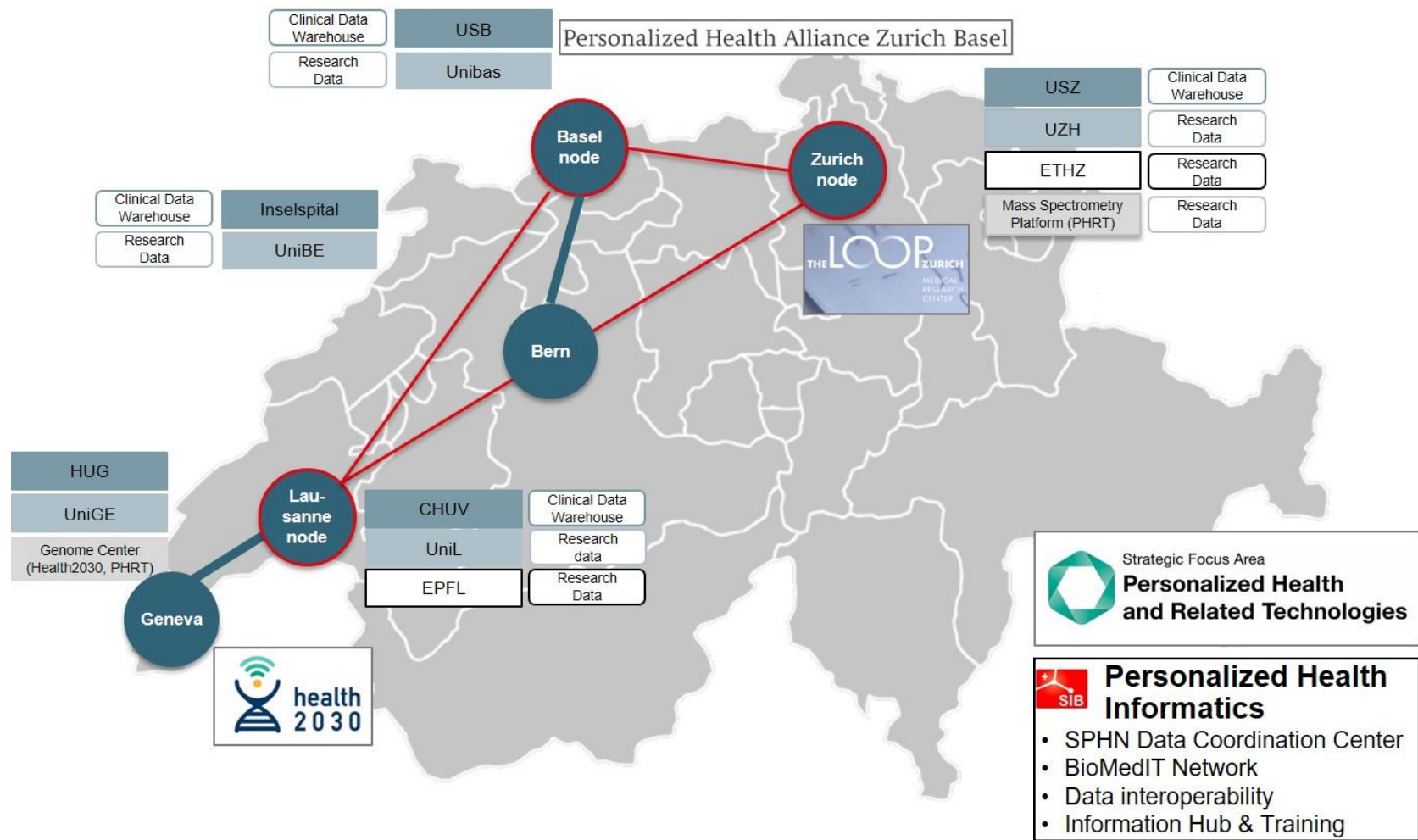
# Goals of SPHN

→ Creation of a scalable and sustainable data-enabling environment (health data ecosystem)

→ Enabling researchers to access, integrate, analyze, and share interoperable health data



# Backbone of the SPHN-PHRT network



# The SPHN value chain

**1) Project planning**  
*What data is available for my research project?*

- Data Catalogues
- Federated Query System
- Data Management Plan (DMP) Guidelines



**2) Project initiation**  
*Requirements to use the data?*

- Single point of contact at the UH
- ELSI-Helpdesk
- Legal agreement templates



**3) Data preparation**  
*Is the data available and interoperable?*

- Established data delivery pipelines at university hospitals
- SPHN Interoperability Framework ensures interoperability and adds value to the data



**4) Data transfer and analysis:**  
*Where can I analyze sensitive data?*

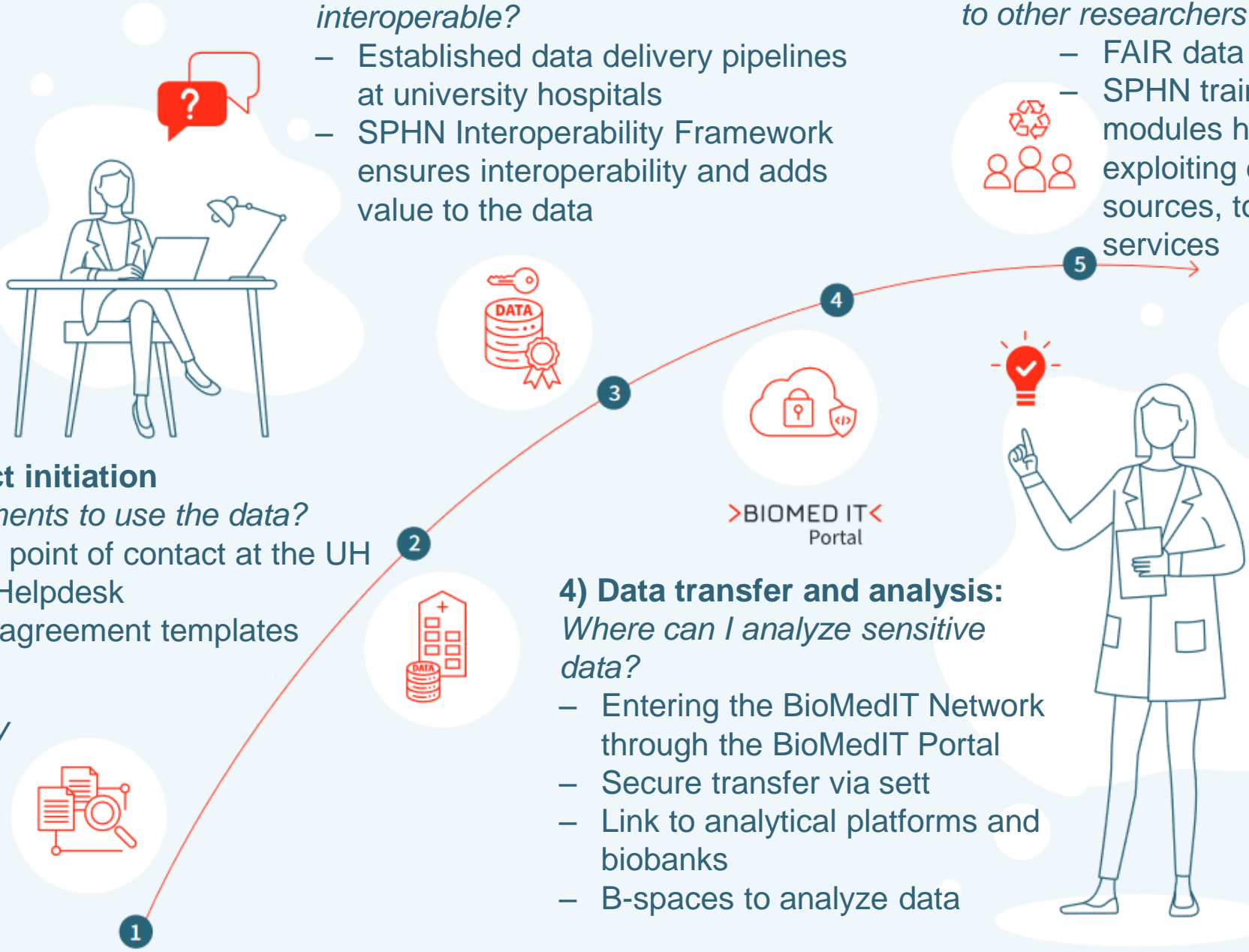
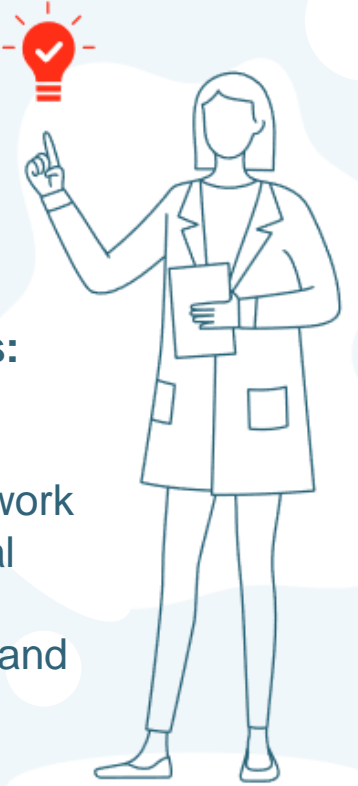
- Entering the BioMedIT Network through the BioMedIT Portal
- Secure transfer via sett
- Link to analytical platforms and biobanks
- B-spaces to analyze data



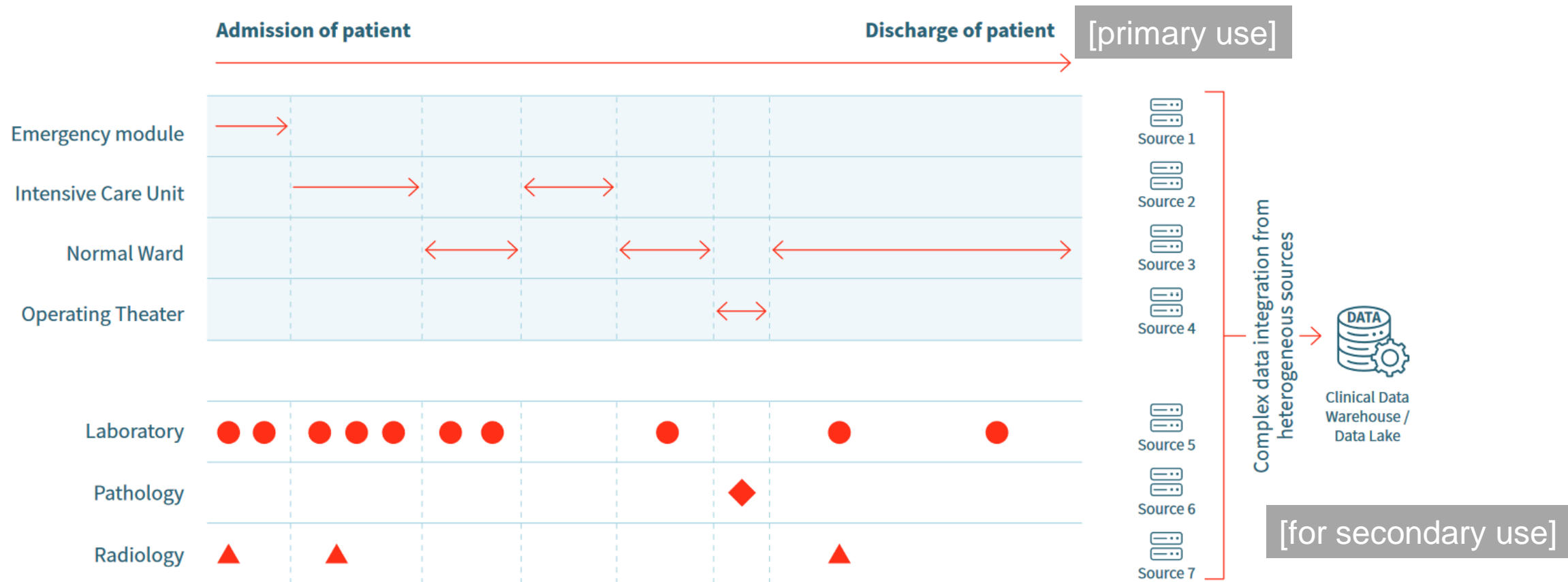
>BIOMED IT<  
Portal

**5) Data reuse**  
*How can I make data accessible to other researchers?*

- FAIR data repositories
- SPHN training modules help exploiting data sources, tools and services



# Routine health care data capture in hospitals

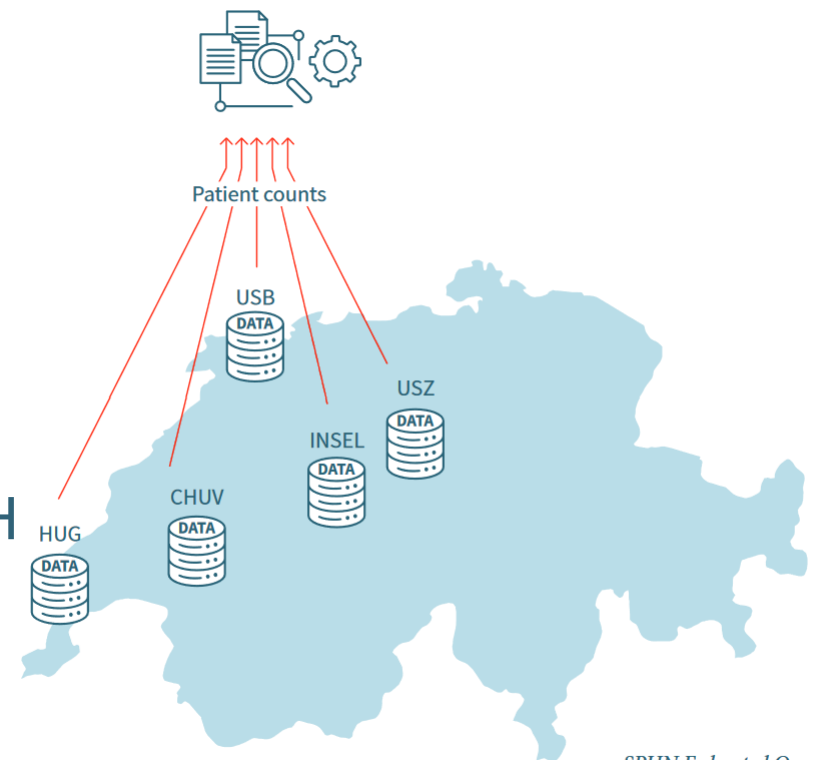


# Feasibility – the SPHN Federated Query System

<https://www.youtube.com/watch?v=Jj-wLIFeWNo>

Allow researchers to assess whether and where patients or patient data potentially suitable for a specific research question exists

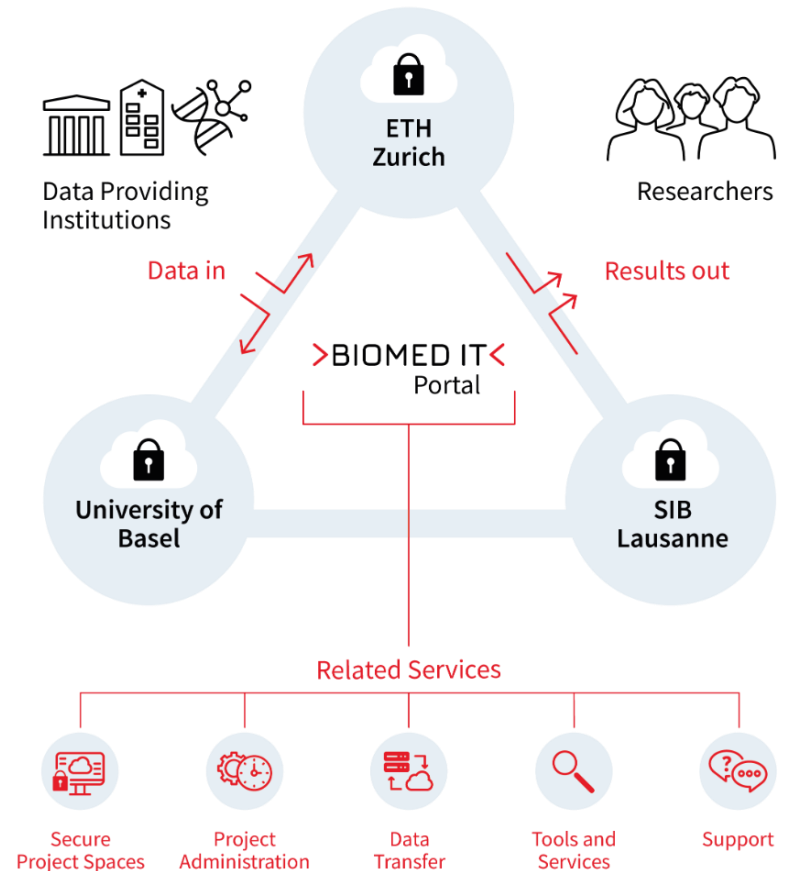
- Currently accessible to researchers from the 5 UH
- Soon available to biomedical researchers from all swissuniversities research institutions



SPHN Federated Query System

# Data transfer and analysis / BioMedIT

- Switzerland's secure environment for research using sensitive data
- Allows for the mobilization of health data, its processing and exploitation for research purposes
- Encrypted data comes into the environment, data remains on BioMedIT, only non-sensitive data (results) are taken out



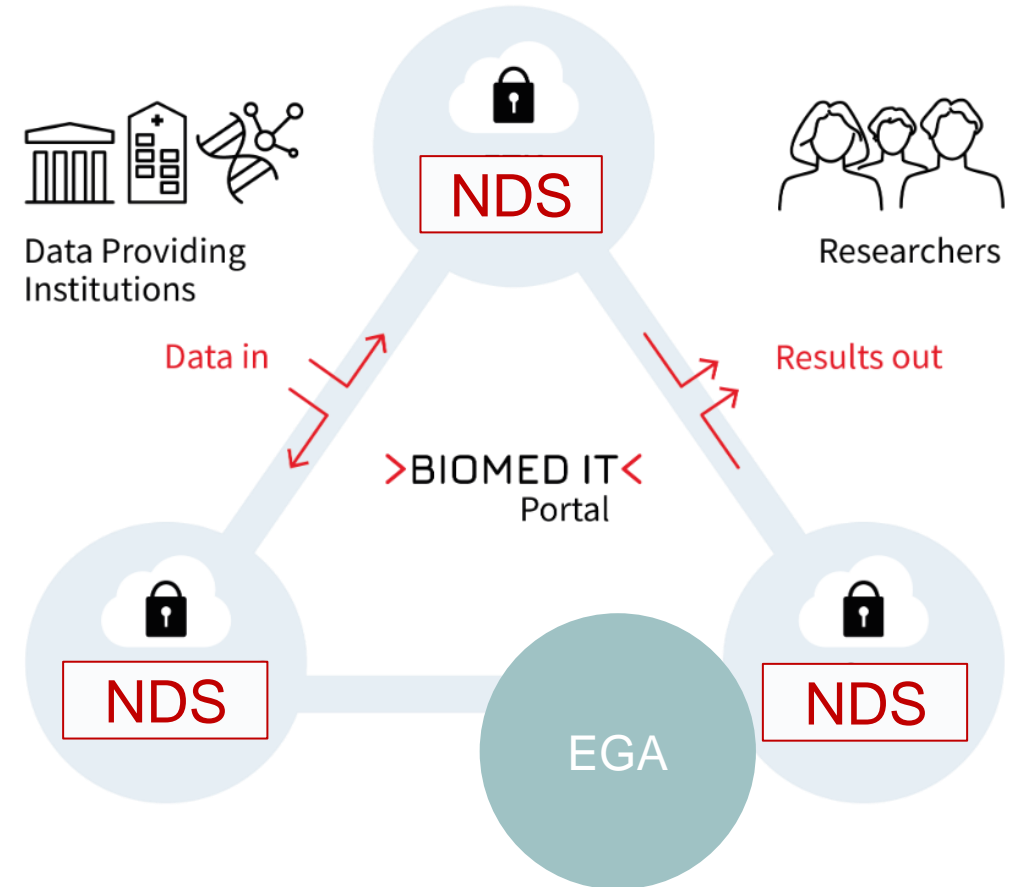
ETH zürich



# Data reuse

In progress:

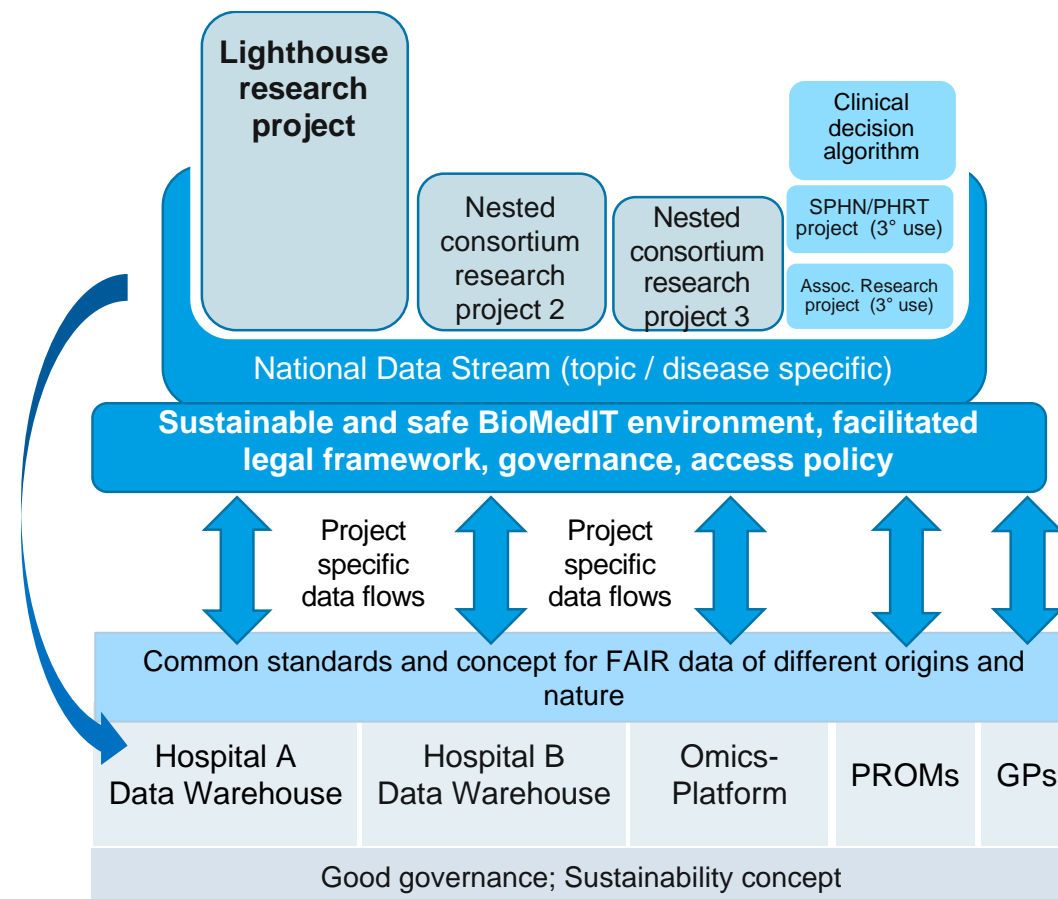
- EGA node (Swiss Federated Genomics Network) tbd if on one of the existing nodes or as special node
- 4 National Data Streams
  - Infection-related outcomes in ICUs
  - Oncology
  - Pediatrics
  - Quality of Care





# SPHN/PHRT National Data Streams (NDS)

- Growing, data-rich research platforms for the next generation of researchers and clinicians
- Cornerstones and main use cases for the SPHN FAIR data ecosystem
- Crystallization points for additional activities



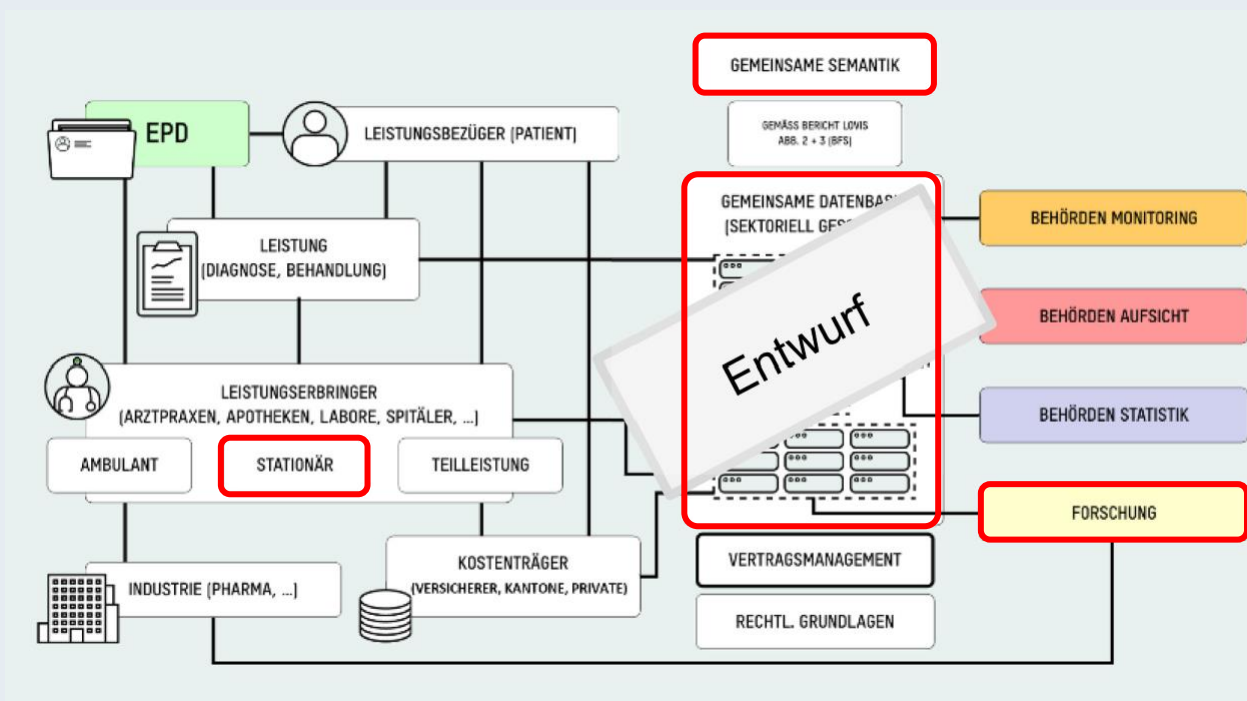
# Beyond 2024: The future Data Coordination Center

- SERI mandated SPHN to set out the options for the continuation of the data infrastructures after 2024 and to carry out the necessary clarifications
- A first report has been presented in April 2022 and was well received
- Refinement of the report ongoing, to be handed in end of 2022

## Vision

The future DCC is the central coordination and competence center in Switzerland for health data in the research domain and enables production, exchange and use of FAIR health data across the country in collaboration with data providers, data producers, data holders, data users, and the network partners.

# SPHN in the context of Swiss efforts for functioning health data flows



## Further efforts of SPHN:

- Further development of the data management systems in the UH
- Connecting additional data providers to the network
- Nationwide Interoperability Framework in close collaboration with the partners (e.g., UH, eHealth Suisse, FSO, FOPH, Oncosuisse, SAKK, etc.)
- Contribution to the national expert group on data management in the health care sector

Bundesratsbericht 12.01.2022: Verbesserung des Datenmanagements im Gesundheitsbereich

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