

SciDataCon 2023

organized by



as part of



Data Stewards and FAIR Data Training in Biomedical Research

Jens Dierkes

Julia Fürst, Birte Lindstädt, Ines Perrar, Katja Restel, Aleksandra Shutsko

on behalf of the NFDI4Health consortium



Salzburg, 24.10.2023



complexity of data stewardship



Researchers



Professionals



Service Providers



Public



Patients

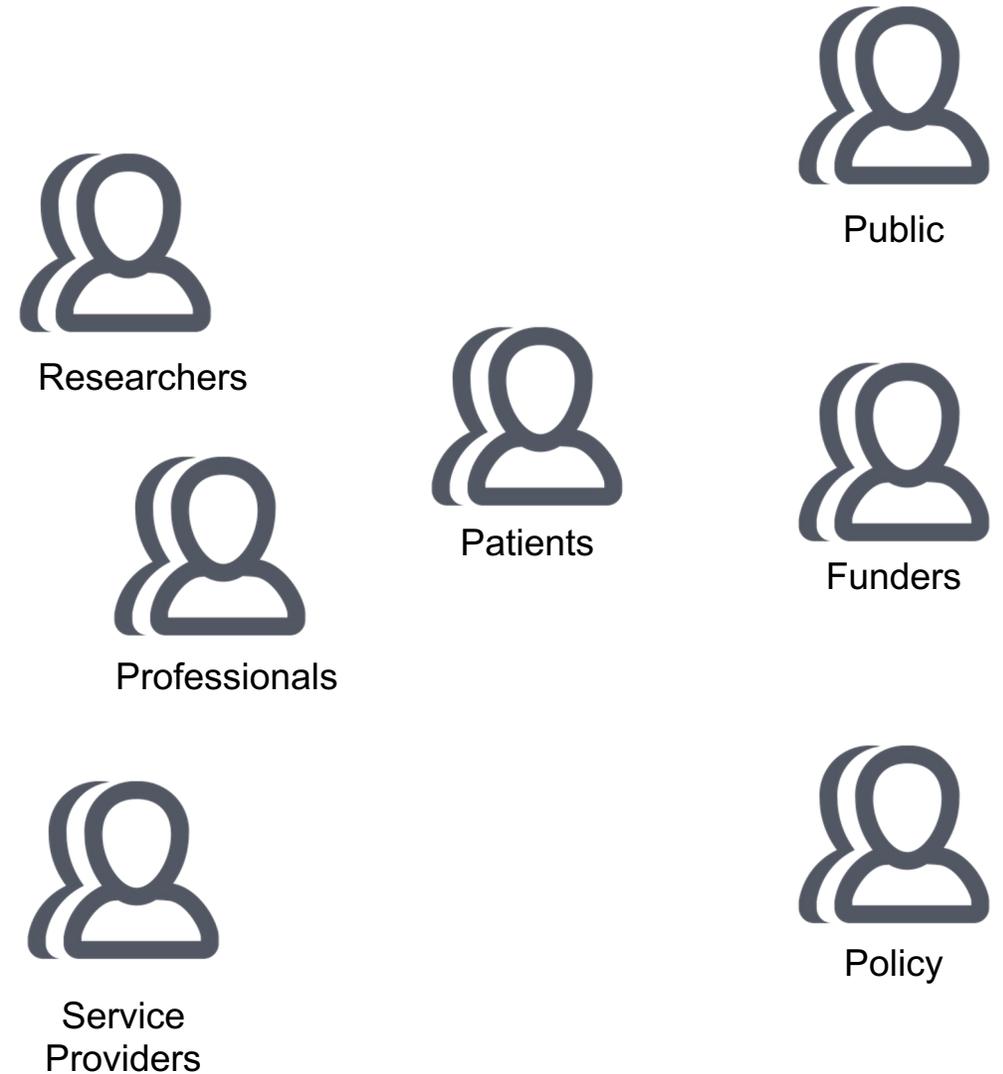
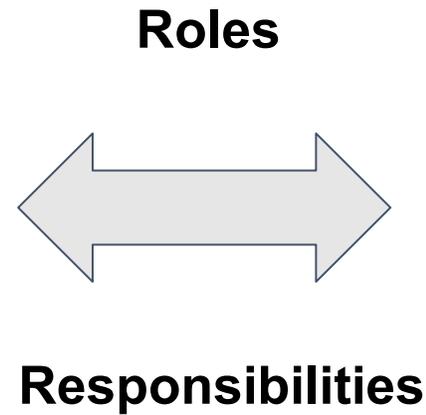


Funders

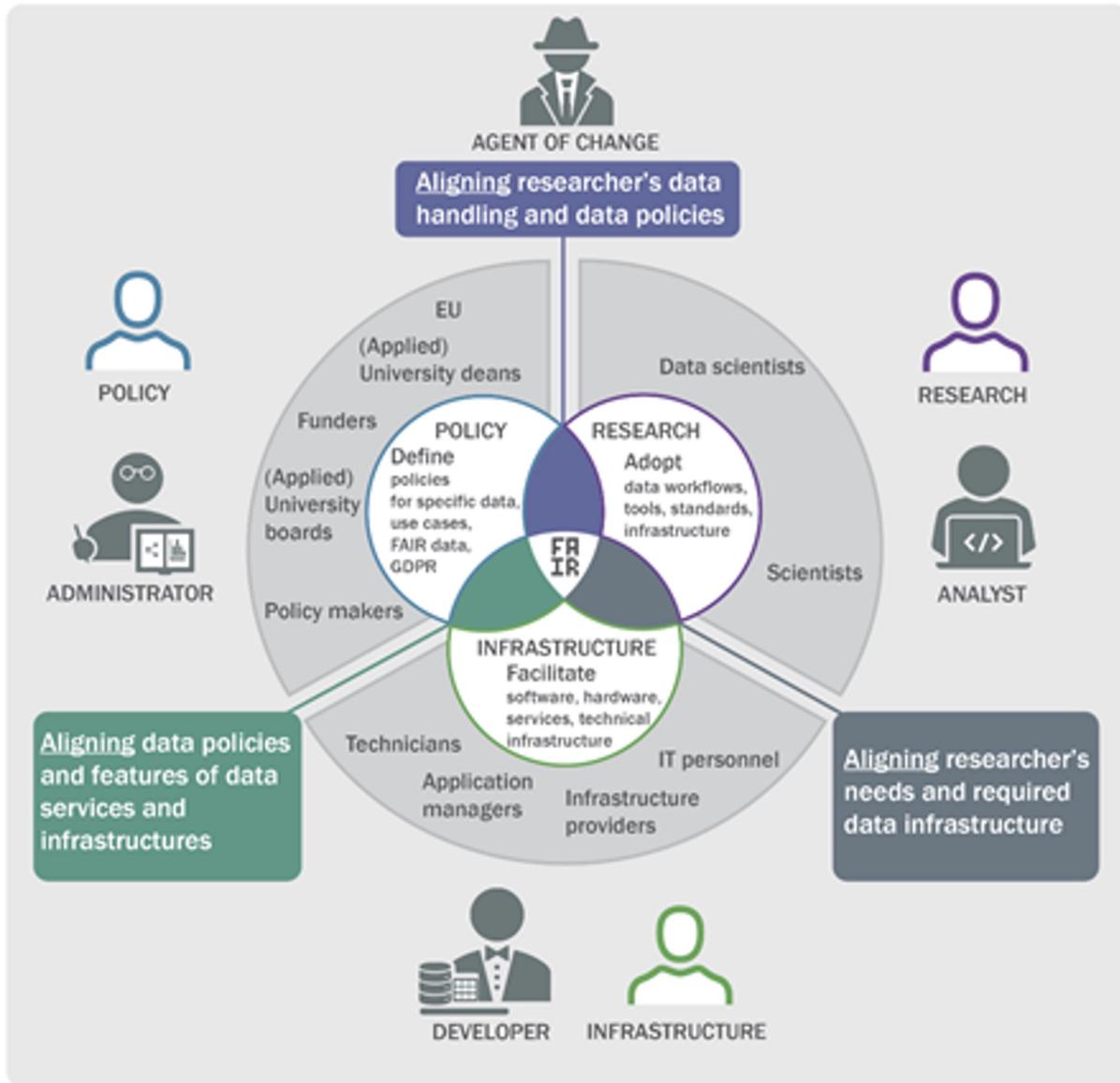


Policy

complexity of data stewardship



data steward roles



 National Forum for Research
 Data Management- Denmark



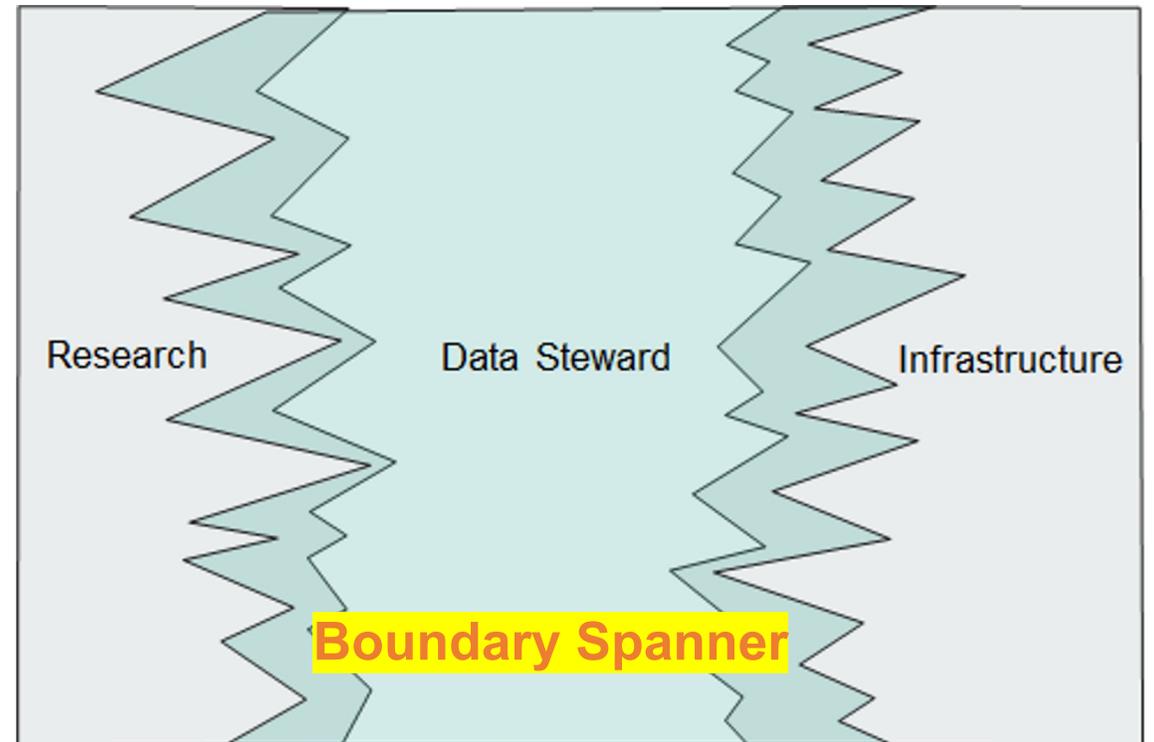
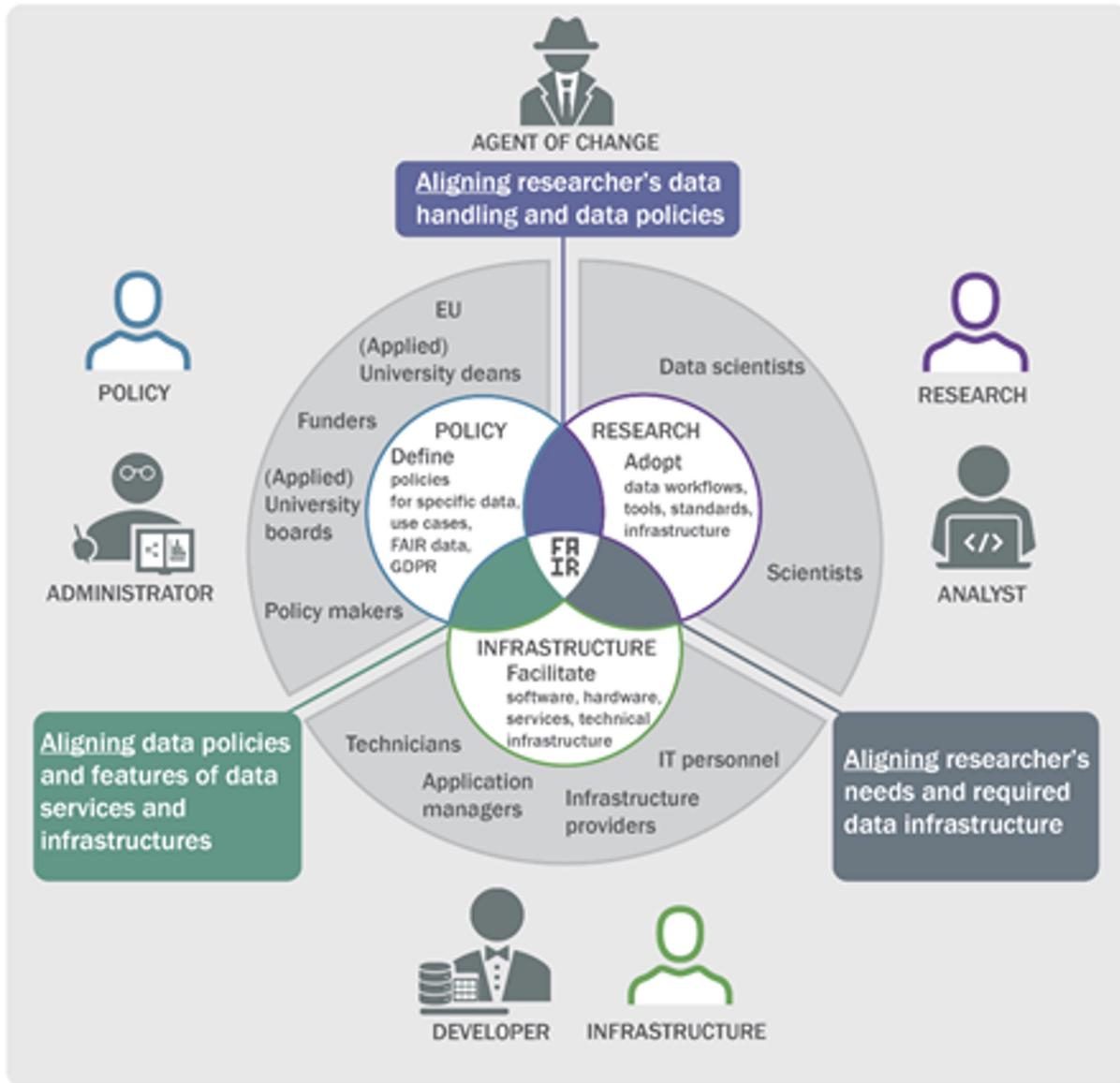
Four roles of a data steward

 ZonMw/ELIXIR project-
 The Netherlands



Three roles of a data steward

data steward roles



Seidlmayer, Eva, Fabian Hoffmann, Jens Dierkes, Birte Lindstädt, Ralf Depping, and Konrad Ulrich Förstner. 'Forschung unterstützen - Empfehlungen für Data Stewardship an akademischen Forschungsinstitutionen', 2023.

<https://doi.org/10.4126/FRL01-006441397>.

Rothfritz, Laura. 'Data Stewardship als Boundary-Work', 22 October 2019.

<https://doi.org/10.18452/20636>.

Frederike Schmitz. (2020). The roles of data stewards in the data stewardship landscape identified in Denmark and the Netherlands. Zenodo. <https://doi.org/10.5281/zenodo.4321265>

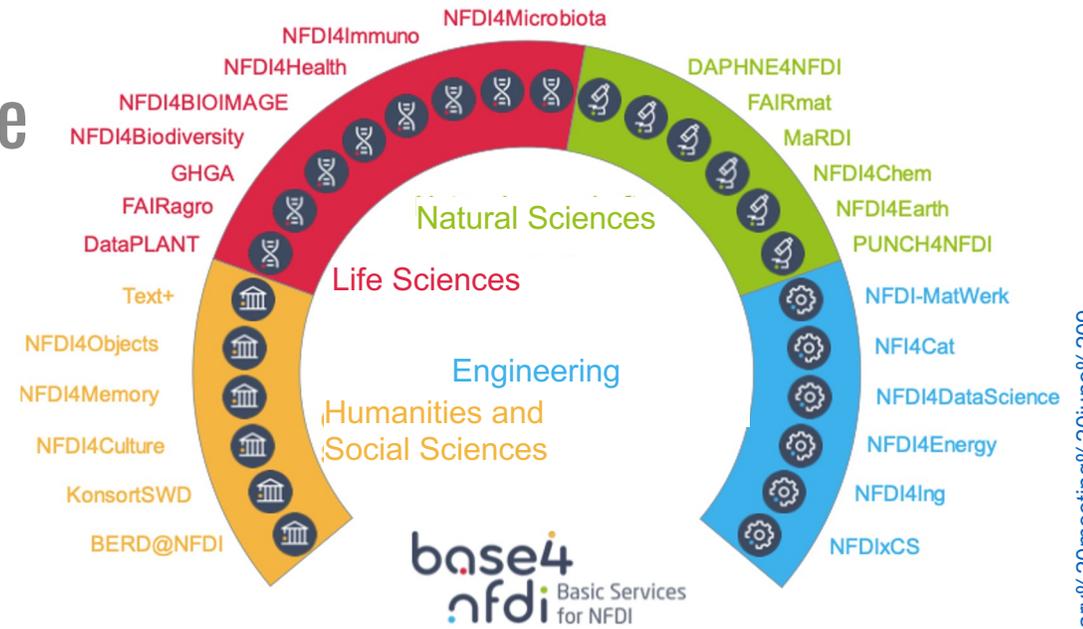
NFDI4Health data steward pilot project



NFDI: national research data infrastructure

Vision: Data as a common good for excellent research, organised by science in Germany.

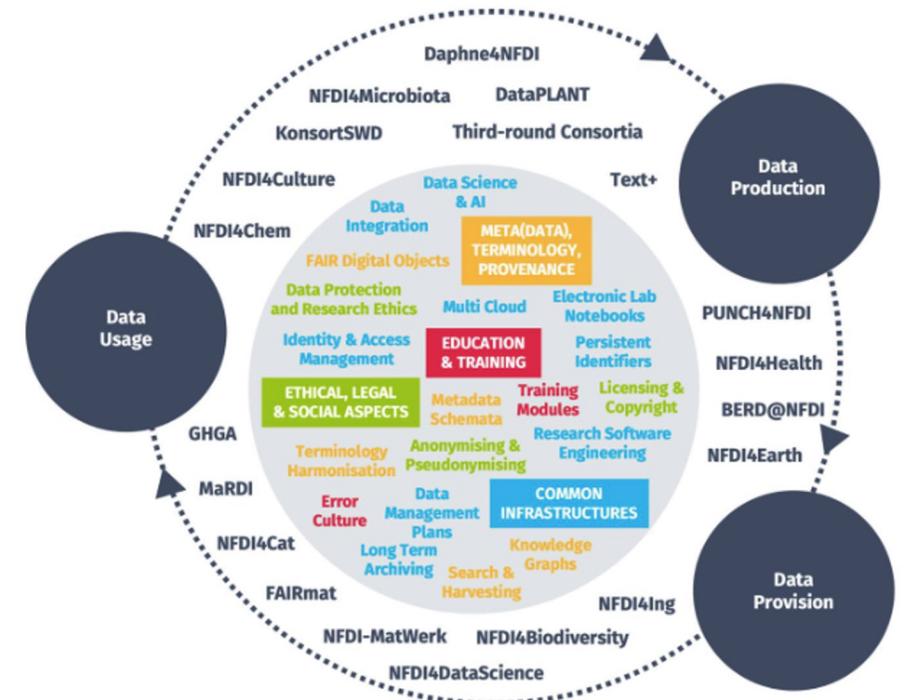
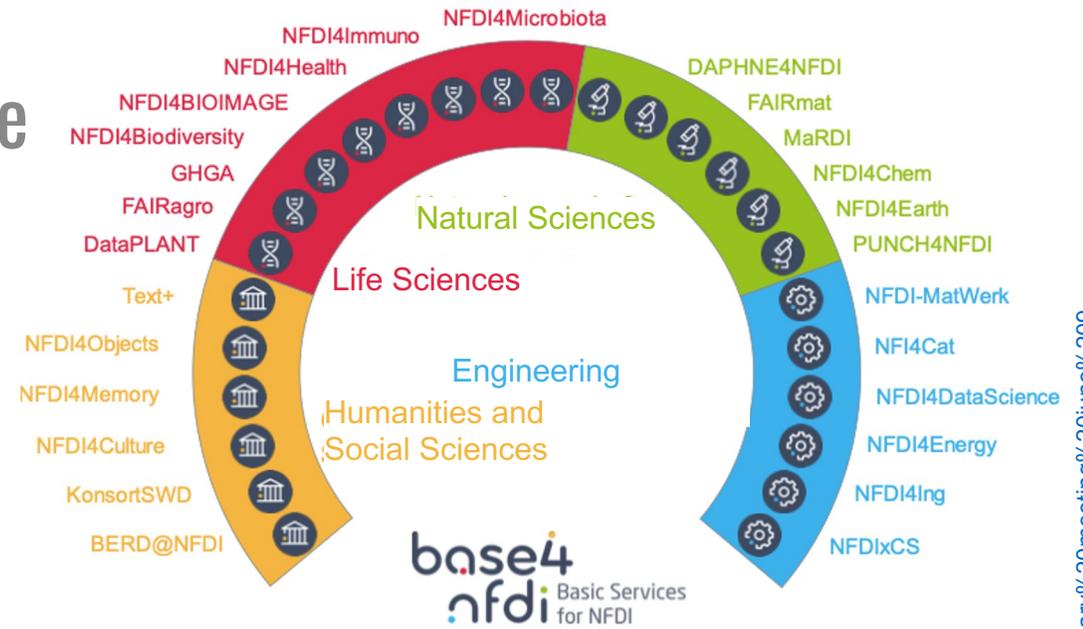
Mission: Step by step, we are improving the possibilities for using data for science and society. [...] In cooperation with national and international partners, we are creating the framework conditions for legally compliant, interoperable and sustainable data infrastructures that are easily accessible for researchers in their everyday work. We educate people, strengthen their competence in dealing with data and open up new career paths.



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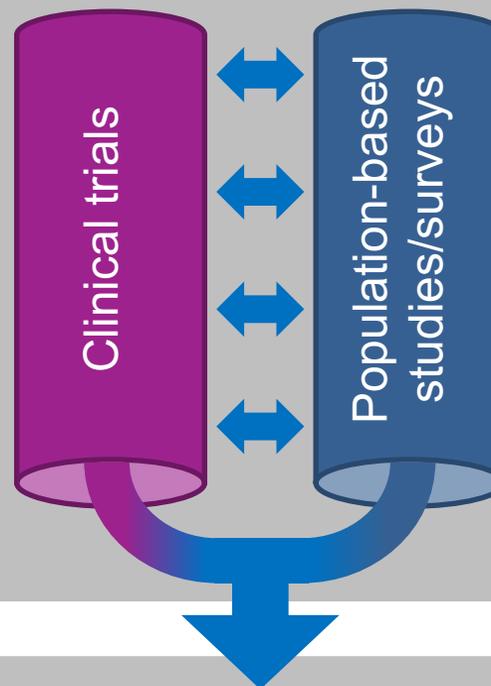


NFDI4Health: NFDI for personal health data

Common search and data access
services
Common standards for (meta-)data

Common data structures

Common consent forms



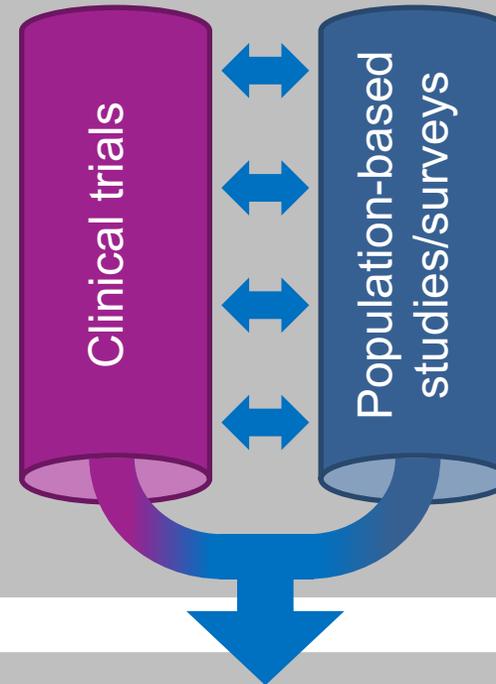
Unlock the silos and enhance the scientific utilization of personal health data in accordance with the FAIR principles.

www.nfdi4health.de

NFDI4Health: NFDI for personal health data



Common search and data access services
Common standards for (meta-)data
Common data structures
Common consent forms

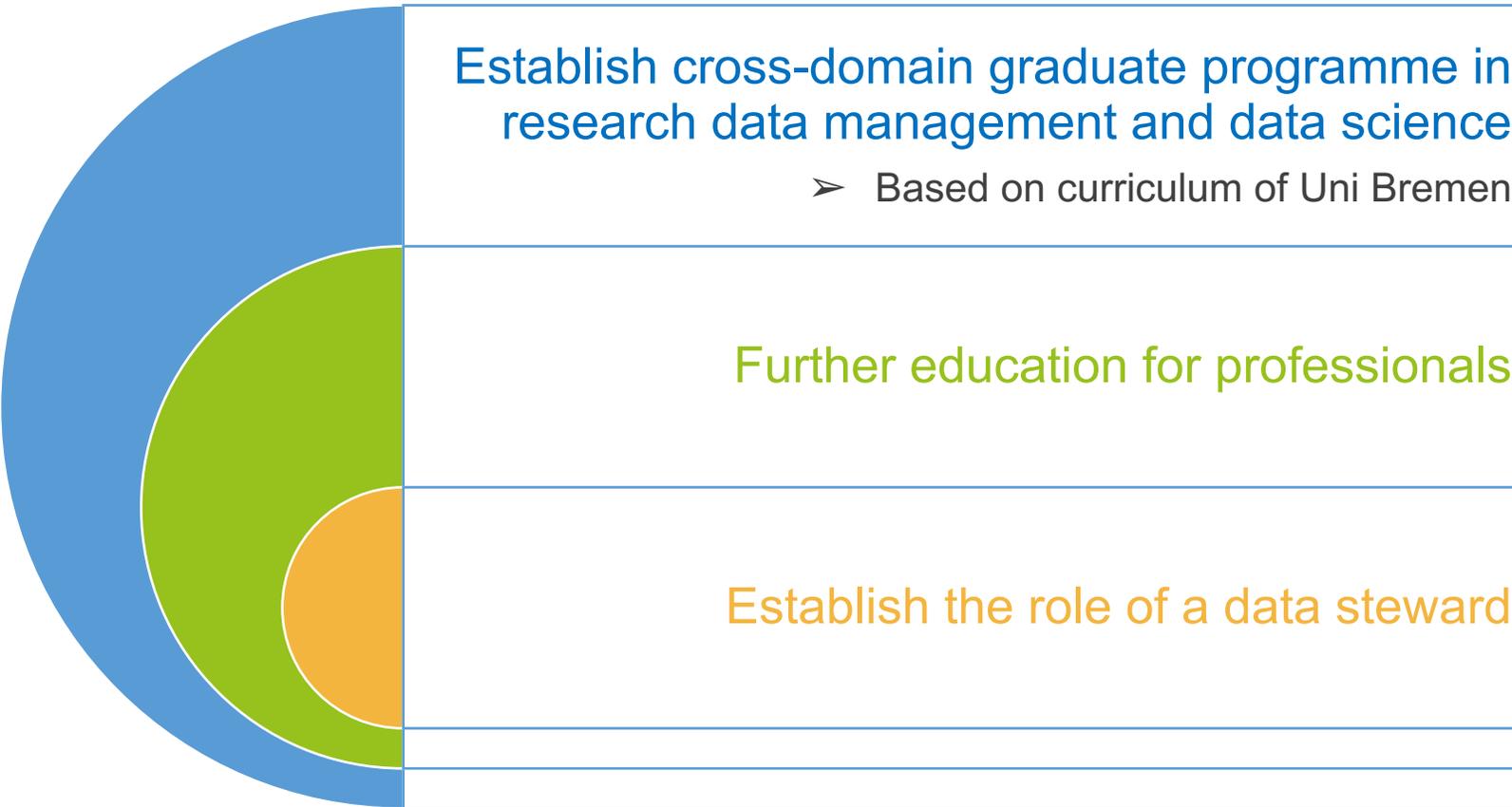


Unlock the silos and enhance the scientific utilization of personal health data in accordance with the FAIR principles.

www.nfdi4health.de

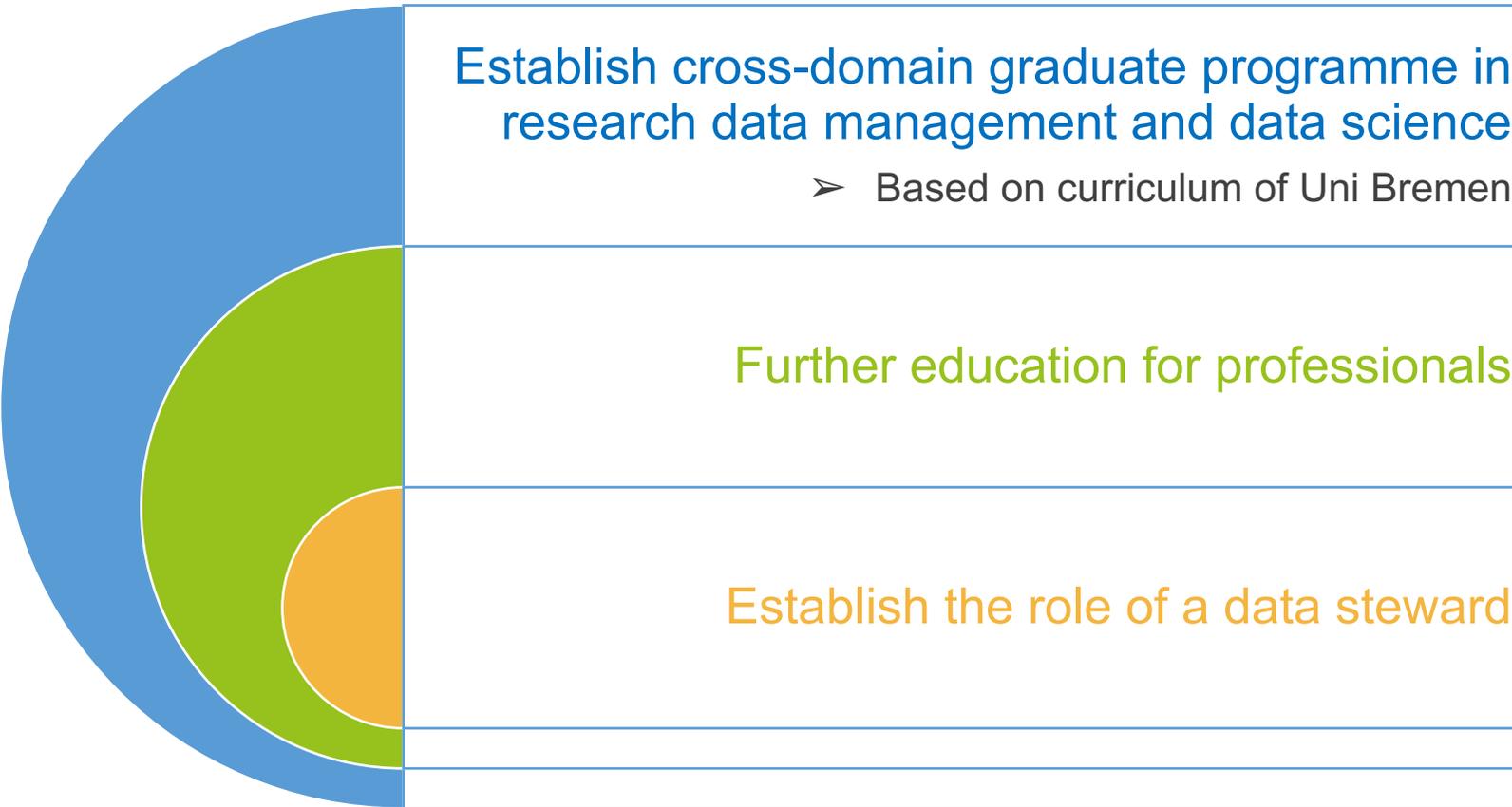
- Duration: initially 5 years (10/20 - 09/25)
- Total budget: €15,133,291
- 17 partner institutions
 - Research institutes: data collection and analysis of health data
 - Infrastructures/ Experts for standards and methods
 - Focus on involving the user community

training and education: data steward pilot project



- Disseminating training material and curricula as open educational resources
- Evaluation and feedback as part of the overall user engagement strategy

training and education: data steward pilot project



Train
researchers/professionals

Establish profiles and
competencies for Data
Stewards

- Disseminating training material and curricula as open educational resources
- Evaluation and feedback as part of the overall user engagement strategy

training

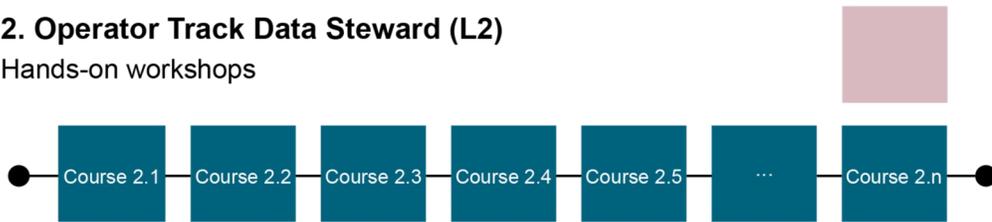
1. Starter Track (L1)

Interactive overview lectures



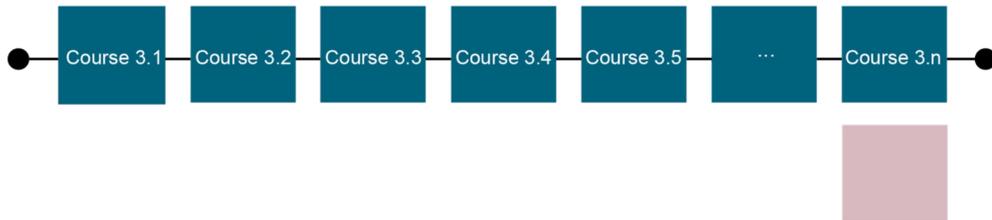
2. Operator Track Data Steward (L2)

Hands-on workshops



3. Operator Track Data Scientist (L2)

Hands-on workshops



Level

L 1: Level „understand“

L 2: Level „apply“

Courses

• ■ ■ • Basic structure
• ■ ■ • of the tracks

■ discipline -sp. courses

<https://www.bremen-research.de/data-train/about-data-train/data-train-model>

- [Data Train](#) concept, syllabus, implementation report
- Collection and discussion of RDM competencies related to health data
 - “[Learning objective matrix on the topic of research data management \(RDM\) for the target groups of students, PhDs and data stewards](#)”
- NFDI4Health RDM training courses
 - materials as OER

Dierkes, J. et al. 2023. ‘Training Concepts in Research Data Management and Data Science with the Focus on Health Research’. Accessed 19 October 2023.
<https://doi.org/10.4126/FRL01-006441348>.

data steward pilot project

- **Data Steward @ academic libraries**
 - ZB MED → epi studies
 - USB Cologne → clinical studies

data steward pilot project

- **Data Steward @ academic libraries**

- ZB MED → epi studies
- USB Cologne → clinical studies

- **Main tasks**

- Familiarize w/ health researcher's perspective
- Iteratively develop publication policies, metadata schemas, DMPs for epi and clinical studies
- Jointly (data stewards) develop training concepts
 - Basic RDM
 - NFDI4Health products
- Collect feedback from users on needs and usability of NFDI4Health products

**Data Steward
at Library**
ZB MED



Researchers
Epidemiological studies

**Data Steward
at Library**
UCL Colgne



Study Centre
ZKS (Centre for Clinical
Trials) at Cologne Uni



Researchers
Clinical studies

**Data Steward
at Library
ZB MED**



**Researchers
Epidemiological studies**

**Data Steward
at Library
UCL Colgne**



**Study Centre
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Trials) at Cologne Uni**



**Researchers
Clinical studies**

**Proximity
is key!**

Data Steward
at Library
ZB MED



Researchers
Epidemiological studies

Epidemiological studies pilot project

- Data Steward **counterpart** on the researchers' side
 - Iterative development and testing of publication policy and a DMP for epi studies
- Development and delivery of a RDM training specifically for epi researchers
 - Joined by clinical Data Steward

**Data Steward
at Library
UCL Colgne**



**Study Centre
ZKS (Centre for Clinical
Trials) at Cologne Uni**



**Researchers
Clinical studies**

Clinical studies pilot project

- ZKS acts as **intermediary**
 - Is service provider
 - Has its own agenda / challenges
- **Semantic challenges**
 - E.g., different meanings of data management
- **Lack of direct communication** to researchers

Office of the Dean
RDM competence
center

Data Steward
at Library
UCL Cologne



Study Centre
ZKS (Centre for Clinical
Trials) at Cologne Uni



Researchers
Clinical studies

Clinical studies pilot project

- ZKS acts as **intermediary**
 - Is service provider
 - Has its own agenda / challenges
- Semantic challenges
 - E.g., different meanings of data management
- **Lack of direct communication** to researchers
- Improvement
 - Great need for information on RDM
 - Webinars on local RDM services and NFDI4Health
 - ZKS needs new data infrastructure
 - new user and new element for Data Steward
 - Implementing Local Data Hub as new data infrastructure

data steward competencies

- Methodological
 - Specialist
 - Interpersonal
 - Social
-
- Communication, bidirectional translation; proximity
 - Epi: focus on metadata, DMP
 - Clinical: awareness level, local data infrastructure

conclusion

- There is no one Data Stewardship
- Find local answers to local needs → modular profiles for health Data Steward → *Poster 74*
- Continue to develop specific training materials for researchers but also for Data Stewards to reuse
- Input for certificate courses for Data Steward education
- Engage in exchange with professional associations, e.g., DVMD → Curricula

References

Dierkes, J. et al. 2023. 'Training Concepts in Research Data Management and Data Science with the Focus on Health Research'.
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www.nfdi4health.de



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