



## **TMF – A Common Platform for Medical Research Networks in Germany**

Improving the Organisation and Infrastructure  
of Medical Research in Cooperative Structures

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### **TMF as operative platform for networked health research**

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# Who is TMF ?

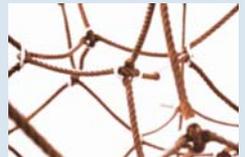
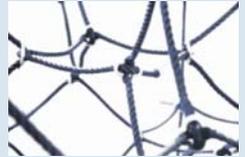
Organisation for Medical Research Network in Germany (Telematikplattform für Medizinische Forschungsnetze)

- ↳ **Meta-organisation** of the medical research associations
- ↳ Funded by the German Ministry of Education and Research (BMBF)
- ↳ Founded in **1999** parallel to the establishment of the large scale collaboration projects in the German research fields:
  - ↳ Competence networks in medicine (KN)
  - ↳ Coordinating centres for clinical trials (KKS)

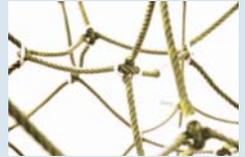


## Meta-organisation TMF

- ↪ Networked research: common demands and problems (technical, legal, organisational)
  - ↪ central nation-wide acting partner for issues of networked medical research
  - ↪ broad focus: technical platform and communication broker within the community
  - ↪ one of the few national central institutions for telematics in health care in Germany



- ↪ to improve medical research in terms of quality, organisation and cooperation
- ↪ to develop high-performance **IT infrastructures**, implementation in interconnected structures
- ↪ to solve common questions of networked medical research (e.g. collecting, processing and exchanging research data)
- ↪ to clarify the **legal and ethical framework** for conducting medical research
- ↪ to contribute to sustainable and efficient health research by improved translation of research findings into health care



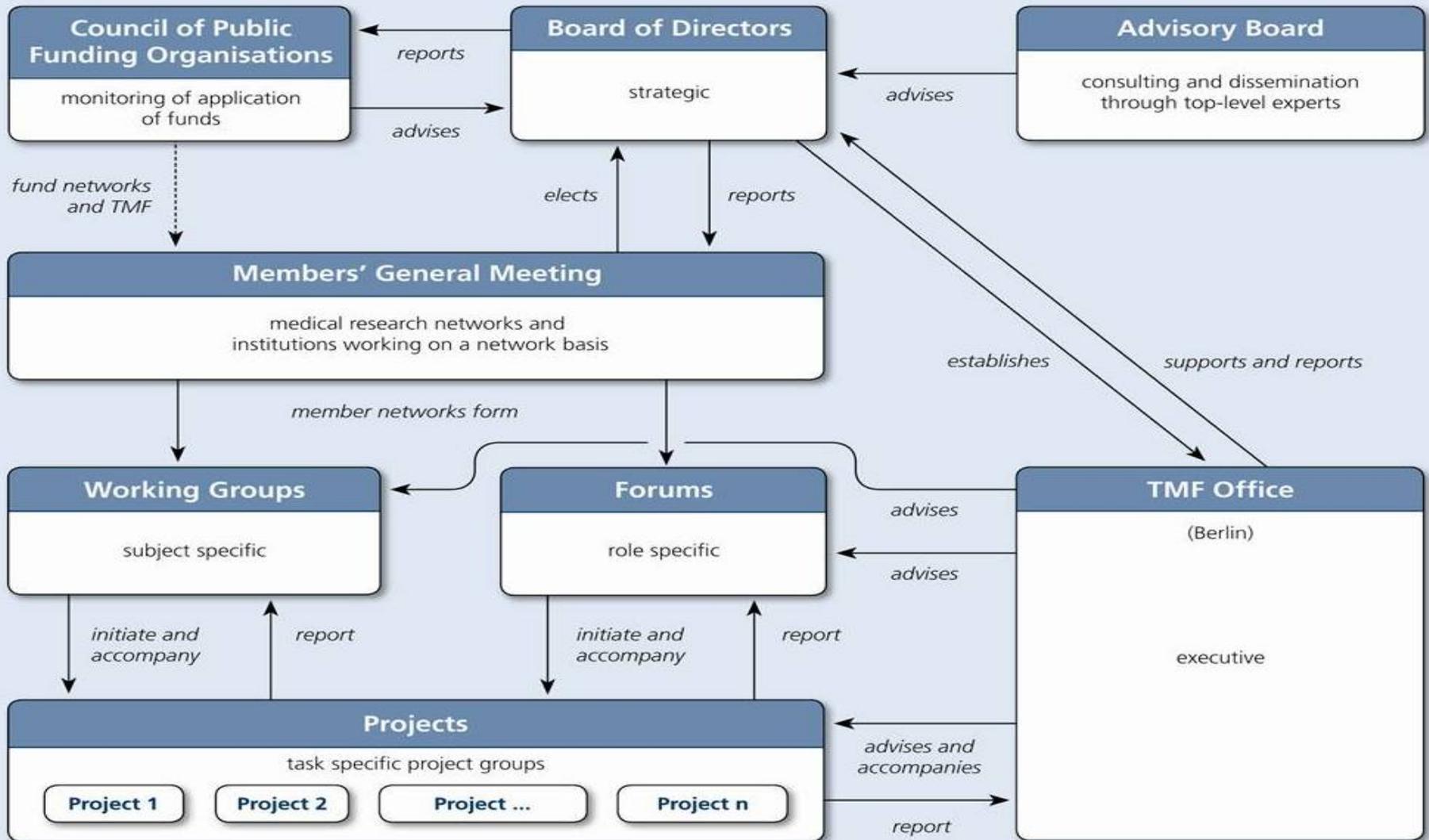
## Members

national networks and institutions

- ↪ Competence Networks in Medicine
- ↪ Coordinating Centres for Clinical Trials
- ↪ Networks for Rare Diseases
- ↪ German National Genome Research Network
- ↪ Fraunhofer Institute for Toxicology and experimental Medicine
- ↪ and others

2007: ca 60 members (2003: 30 members)





## Working groups

- ↪ IT infrastructure and Quality management
- ↪ Data protection, privacy and security
- ↪ Biobanks
- ↪ Management of clinical trials
- ↪ Molecular Medicine



## Forums

- ↪ 3 role-specific forums:  
Network speakers, CEOs, PR officers
- ↪ Rare Diseases Networks
- ↪ **NEW:** Forum Grid





## TMF Projects

- ↪ bottom-up approach
- ↪ scientist-defined needs and projects, funded by BMBF (via TMF)

## Main topics

- ↪ Legal and ethical framework conditions
- ↪ IT infrastructure for clinical research
- ↪ Interconnection of research and health care
- ↪ Standards and terminology
- ↪ Quality management

# Legal and ethical frameworks conditions

## Projects

- ↳ generic data protection strategies
- ↳ patients' informed consent
- ↳ biobanks
- ↳ ...



# Quality management

## Projects:

- ↪ validation of IT systems
- ↪ Standard Operating Procedures
- ↪ monitoring strategies for IITs
- ↪ ...

# Interconnection of research and health care

## Projects:

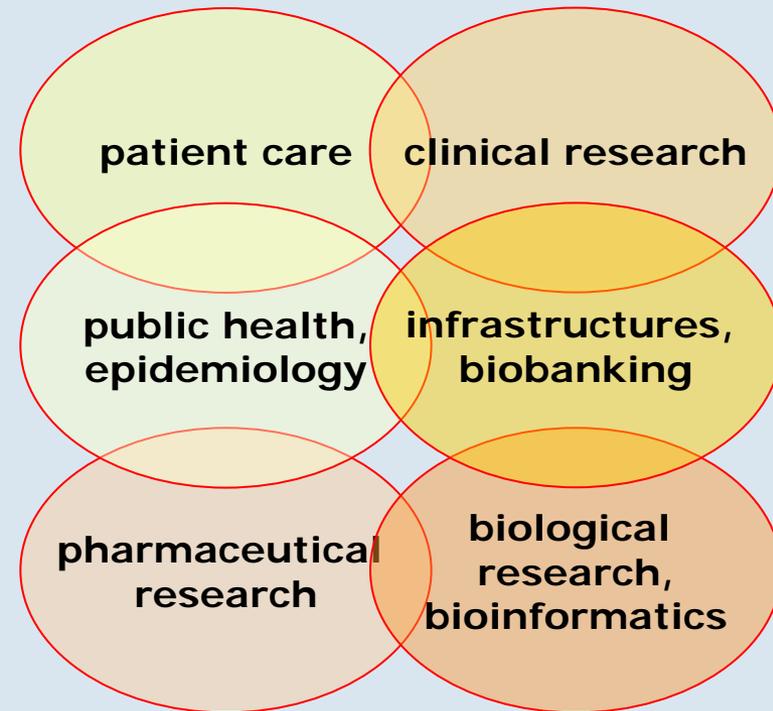
- ↪ electronic health card /health professional card
- ↪ IT support for clinical guidelines
- ↪ interfaces between documentation systems in health care and research
- ↪ ...



## Standards and terminology

Projects and aims:

- ↪ evaluation of CDISC standards
- ↪ CDISC based macros
- ↪ harmonisation of documentation and ontologies, data dictionaries or clinical values
- ↪ contributions to harmonize standards from patient care (HL7/CDA, CCR, ...) and clinical research (CDISC) to epidemiology and bioinformatics
- ↪ ...

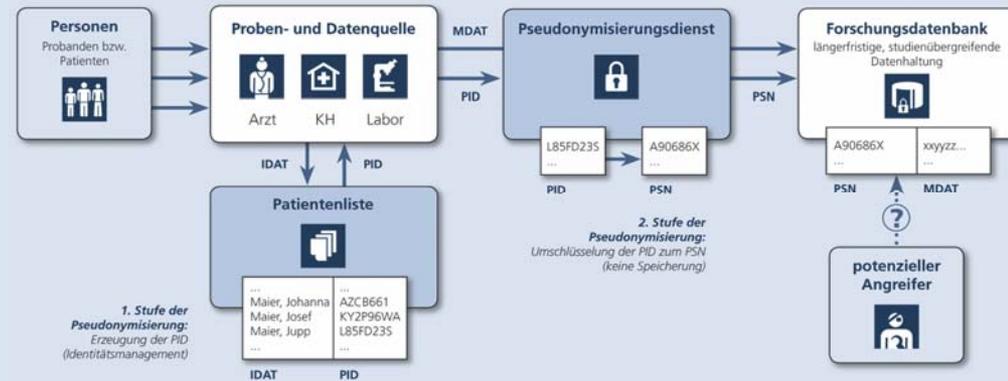


TMF memberships: HL7, CDISC, HealthGrid, D-Grid (via MediGRID), Gematik advisory Board

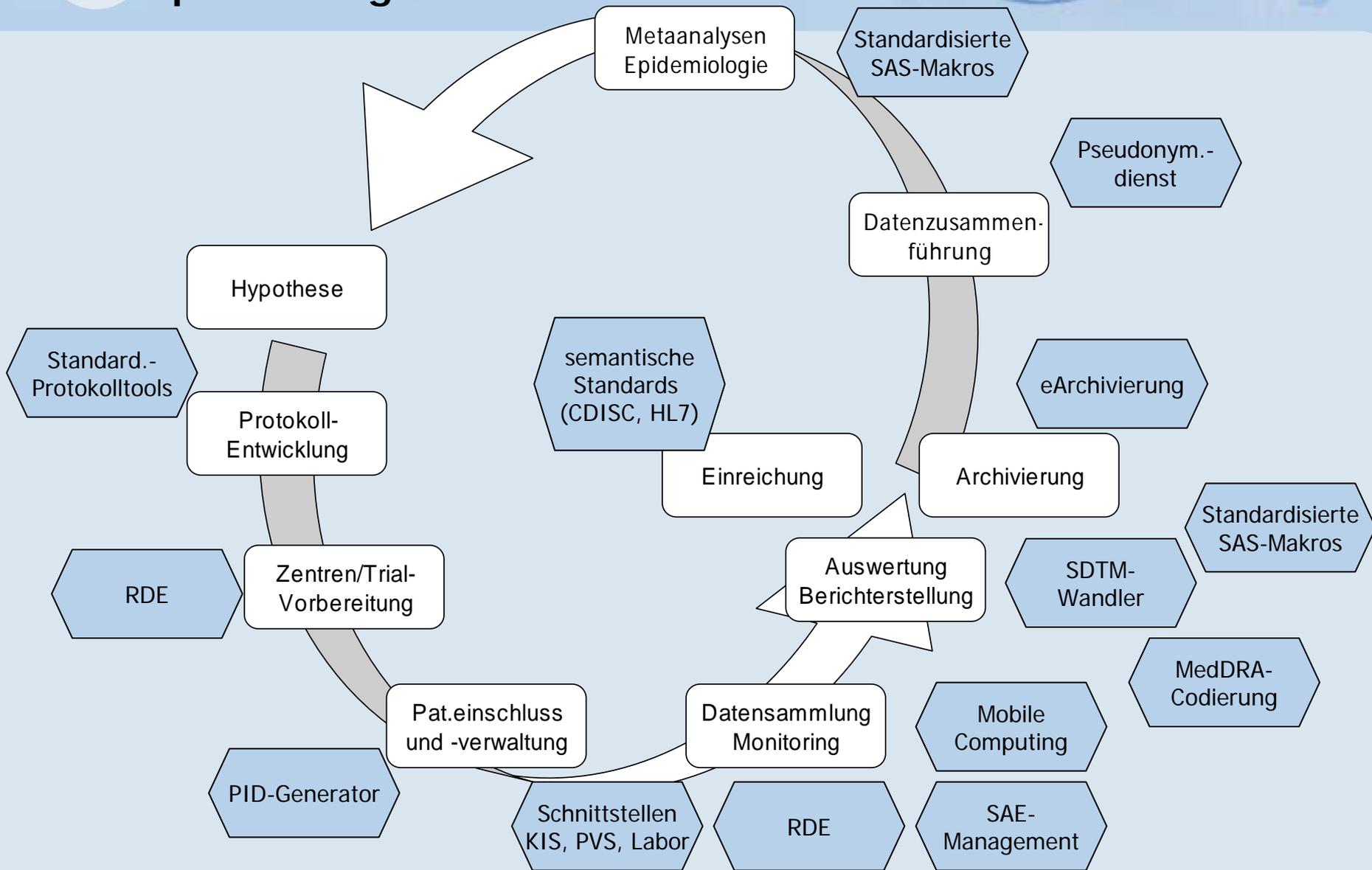
# IT infrastructure for clinical research

## Projects:

- ↪ pseudonymisation software
- ↪ SAE management
- ↪ CDISC-based tools (SAS makros, SDTM converter)
- ↪ MediGRID
- ↪ conceptual work on the use and evaluation of software systems (e.g. archiving and document management systems)
- ↪ involvement in EU infrastructure projects (EATRIS, ECRIN)
- ↪ ...



- 1. Evaluation & delivery of software systems (2001 - 2003)**
  - ↪ clinical trial management software
  - ↪ content management systems (CMS)
- 2. Software development (in case that no adequate systems are available) (2003-2005)**
  - ↪ pseudonymisation suite
  - ↪ data converting tools (CDISC based)
- 3. Establishing of IT services via TMF (since 2006)**
  - ↪ electronic SAE management
  - ↪ pseudonymisation service
  - ↪ electronic data custodianship services (work in progress)
  - ↪ grid based services (work in progress)
  - ↪ ...



- ↪ federal structures and distributed responsibilities in Germany
- ↪ political segmentation of health care and medical research
- ↪ for some fields dependencies on the patient care sector
  
- ↪ incentives for (time consuming) structured documentation ?
- ↪ incentives for using (powerful, but complicated) data and IT standards ?
- ↪ incentives for building up and harmonizing cross-sector data and IT standards ?
- ↪ incentives and criteria for using quality standards ?
- ↪ incentives for using of and working on *one* common IT infrastructre ?
- ↪ long-term strategy vs. project-driven approach



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More Informationen:

<http://www.tmf-ev.de/>

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