



# Building Personalized medicine In Switzerland



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# NATIONAL REGULATORY FRAMEWORK – CARE SYSTEM

## FEDERAL LAW FOR THE SHARED PATIENT RECORD - 2017

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*Ablauf der Referendumsfrist: 8. Oktober 2015*

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### **Bundesgesetz über das elektronische Patientendossier (EPDG)**

vom 19. Juni 2015

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*Die Bundesversammlung der Schweizerischen Eidgenossenschaft,  
gestützt auf die Artikel 95 Absatz 1 und 122 Absatz 1 der Bundesverfassung<sup>1</sup>,  
nach Einsicht in die Botschaft des Bundesrats vom 29. Mai 2013<sup>2</sup>,  
beschliesst:*

#### **1. Abschnitt: Allgemeine Bestimmungen**

##### **Art. 1** Gegenstand und Zweck

<sup>1</sup> Dieses Gesetz regelt die Voraussetzungen für die Bearbeitung der Daten des elektronischen Patientendossiers.

<sup>2</sup> Es legt die Massnahmen fest, die die Einführung, Verbreitung und Weiterentwicklung des elektronischen Patientendossiers unterstützen.

<sup>3</sup> Mit dem elektronischen Patientendossier sollen die Qualität der medizinischen Behandlung gestärkt, die Behandlungsprozesse verbessert, die Patientensicherheit erhöht und die Effizienz des Gesundheitssystems gesteigert sowie die Gesundheitskompetenz der Patientinnen und Patienten gefördert werden.

<sup>4</sup> Die Haftung der Gemeinschaften, der Stammgemeinschaften, der Portale für den Zugang der Patientinnen und Patienten zu ihren Daten (Zugangsportale), der Herausgeber von Identifikationsmitteln, der Gesundheitsfachpersonen sowie der Patientinnen und Patienten richtet sich nach den auf sie anwendbaren Vorschriften.

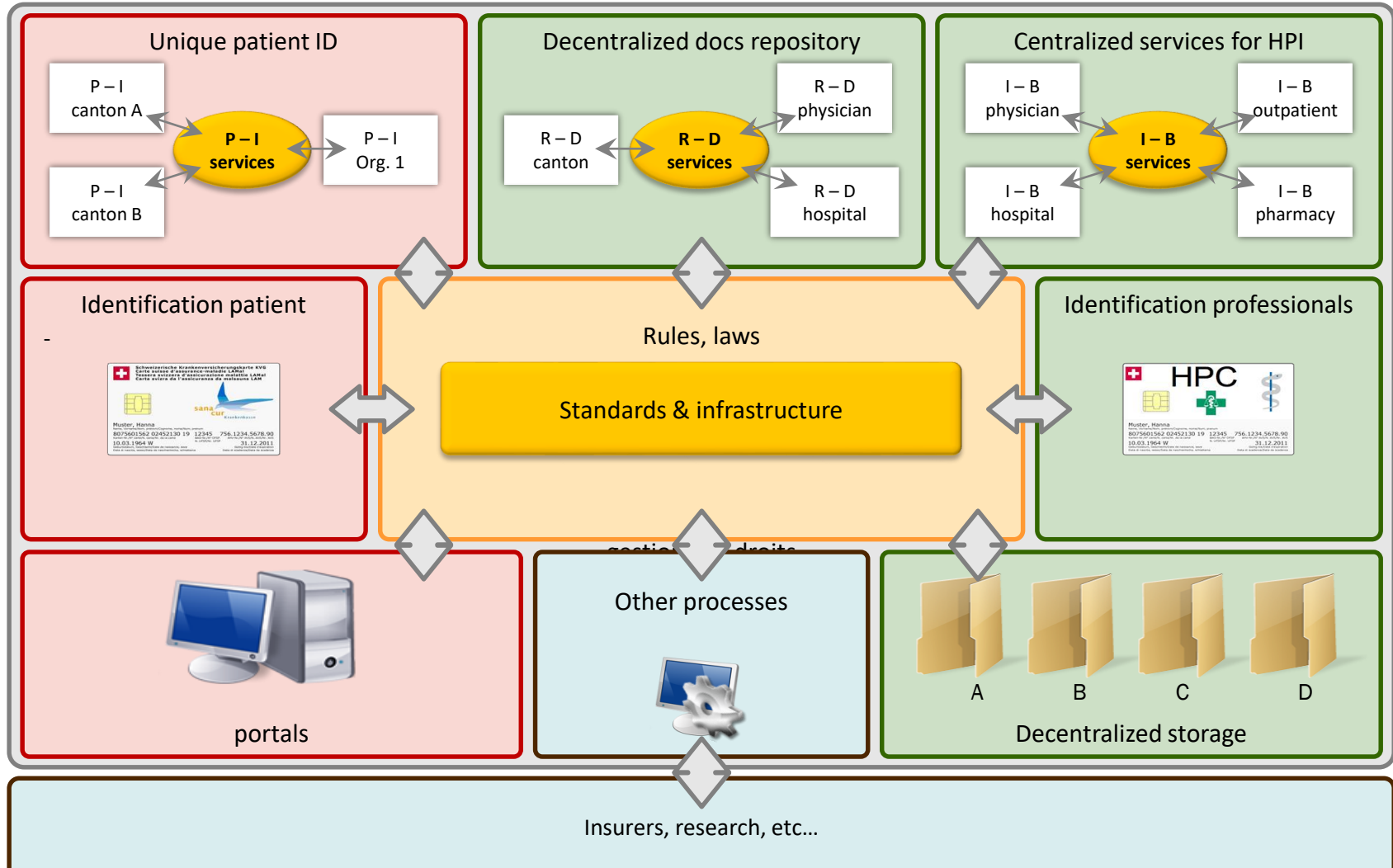
EPDG – 2017 V1

DATENSCHUTZ GESETZ V2

DRAFT EID LAW V1

# NATIONAL REGULATORY FRAMEWORK – CARE SYSTEM

## DISTRIBUTED GRID OF CERTIFIED COMMUNITIES OF CARE PROVIDERS



# NATIONAL REGULATORY FRAMEWORK – CARE SYSTEM

## INTERNATIONAL STANDARDS OF INTEROPERABILITY

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### IHE driven process and methodology

- IHE XCA-XDS profiles
- HL7- CDA data models
- LOINC and SNOMED CT semantics

# SWISS PERSONALIZED HEALTH NETWORK INITIATIVE

## 2017 - 2020

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### 2014 Concept

- 1) „Personalized Health“. Report to discuss options and frame for a new Swiss Initiative.
  - By an interdisciplinary and inter-institutional working group, June 2014.

### 2015 Plan

- 2) Konzept Nationale Förderinitiative: „Systems Medicine – Personalized Health“.
  - 1st SERI commissioned Report by Working Group 1, September 2014.

### 2016 Structure

- 3) Interoperability of clinical and omics data in Switzerland
  - 2nd SERI commissioned Report by Working Group 2 , February 2015

### 2017 Start

- 4) Setting up an Organisational Structure until end of 2015
  - 3rd SERI commissioned Working Group 3

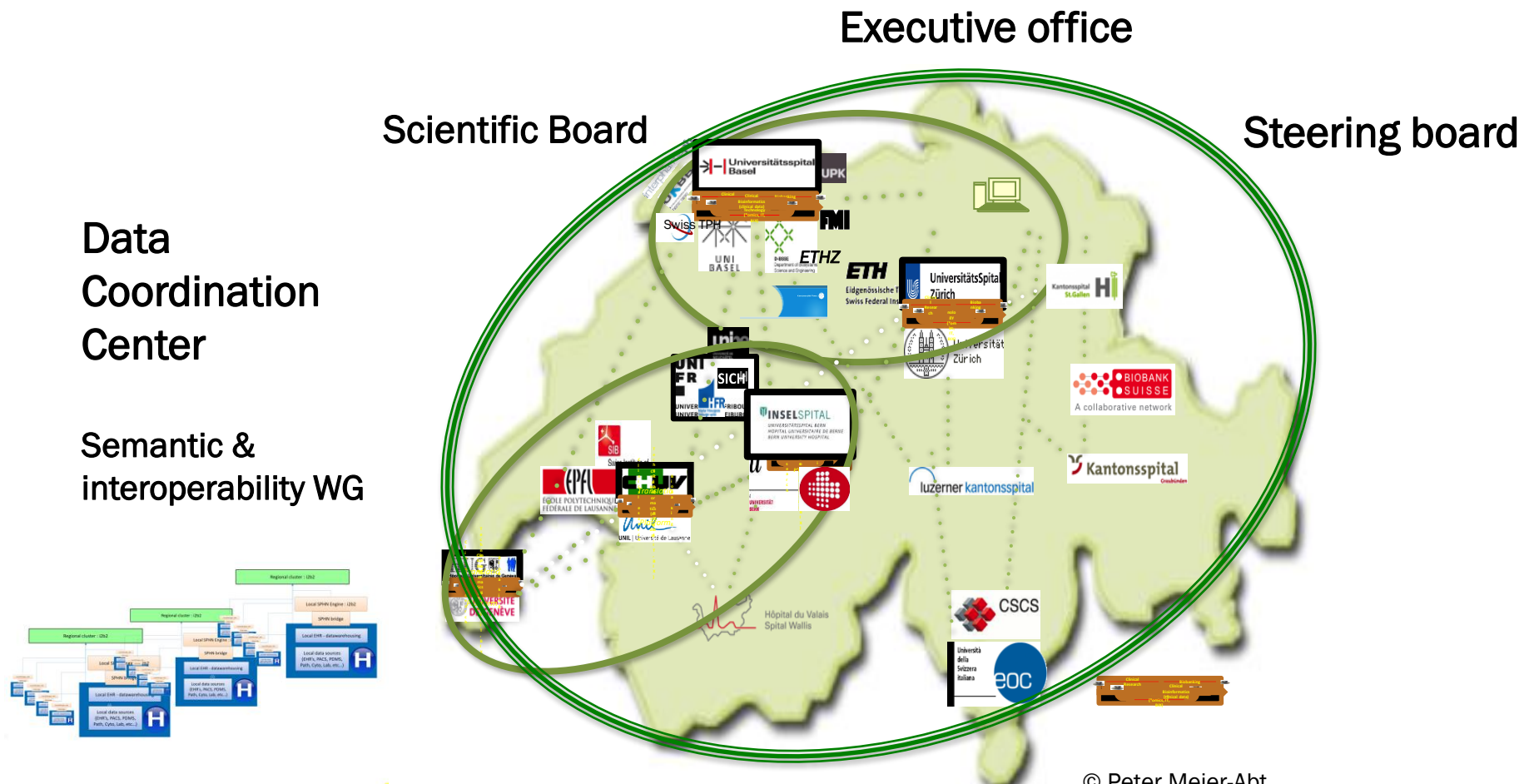


Akademien der Wissenschaften Schweiz  
Académies suisses des sciences  
Accademie svizzere delle scienze  
Academias svizas da las ciencias  
Swiss Academies of Arts and Sciences

# SWISS PERSONALIZED HEALTH NETWORK INITIATIVE

## DISTRIBUTED NETWORK OF REGIONAL CLINICAL DATA CLUSTERS

### Swiss Personal Health Private Research Cloud - SPH-PRC



# I2B2/TRANSMART FOUNDATIONS STANDARDS, SHRINE DISTRIBUTED NETWORK OF REGIONAL CLINICAL DATA CLUSTERS

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## Swiss Personal Health Private Research Cloud - SPH-PRC

**i2b2**

A National Center for Biomedical Computing

Informatics for Integrating Biology & the Bedside

[About Us](#) | [Software](#) | [NLP Data Sets](#) | [i2b2 tranSMART Foundation](#) |

### Collaborations

- Scientific Collaborations
- i2b2 Installations
- Academic Users' Group
- Data Sharing Network (SHRINE)
- Use of our Software
- Data Sharing Policy

### Data Sharing Network (SHRINE)

In their application for CTSA status, Harvard Medical School (HMS) proposed creating a web-based software network (based on the prototype model SPIN, Shared Pathology Informatics Network) that would allow the participating Harvard hospitals to link their respective i2b2 instances for the sharing of obfuscated, aggregated counts of patients meeting selected inclusion and exclusion criteria for demographics, diagnoses, medications, and labs. It was envisioned that this network, called SHRINE (Shared Health Research Informatics Network), would greatly enable population-based research, assessment of potential clinical trials cohorts, and hypothesis formation for followup study by combining the EHR assets across the hospital system.

## CITIZEN CENTERED CONSENT (C3) MANAGEMENT SYSTEM



- Blockchain based smart contracts
- Compositional model of the consent
- Specific implementation of a contract with an indefinite parts
- RESTful API implementation of the service
- In test currently
- 6 trusted distributed authorities foreseen:
  - 5 CH university hospitals
  - SwissEthics

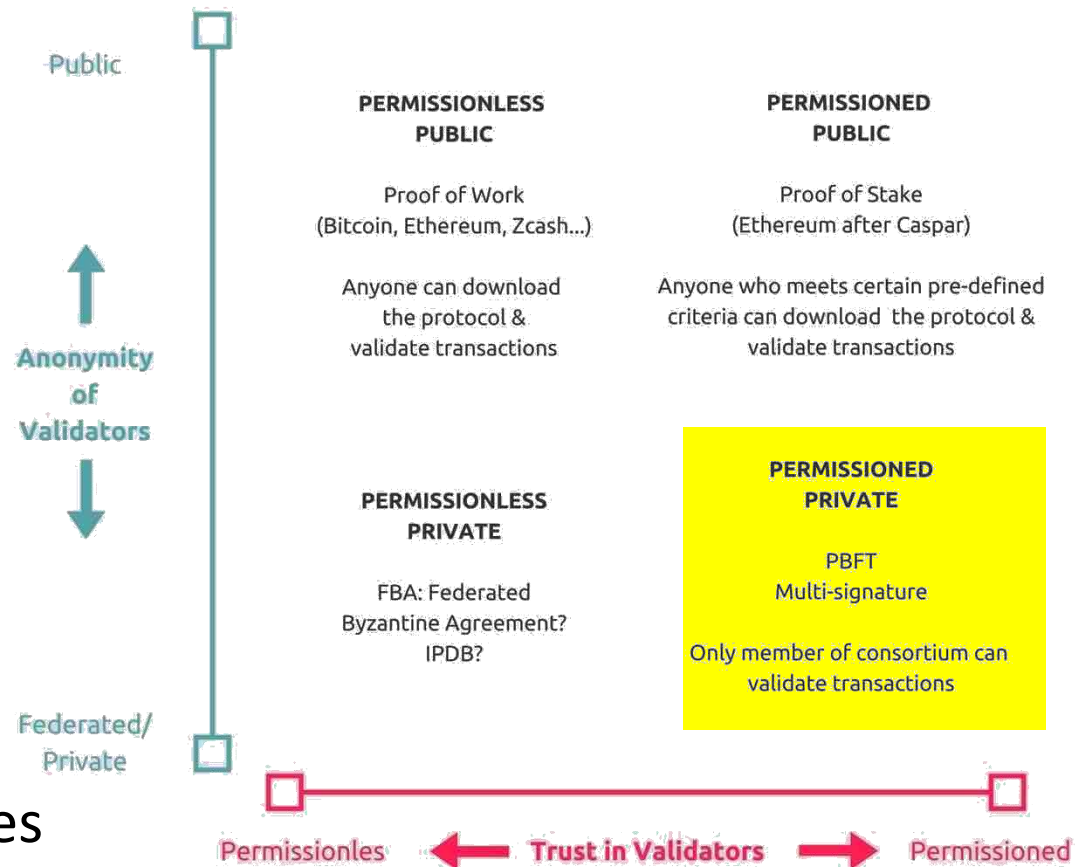


# SPHN SMARTCONSENT

## CITIZEN CENTERED CONSENT (C3) MANAGEMENT SYSTEM



- Citizen-centered
- Shared
- Dynamic
- Transparent
- Infrastructure
- Backbone
- Private to known nodes



# SWISS PERSONALIZED HEALTH NETWORK INITIATIVE

## DATA STRATEGY

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