Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

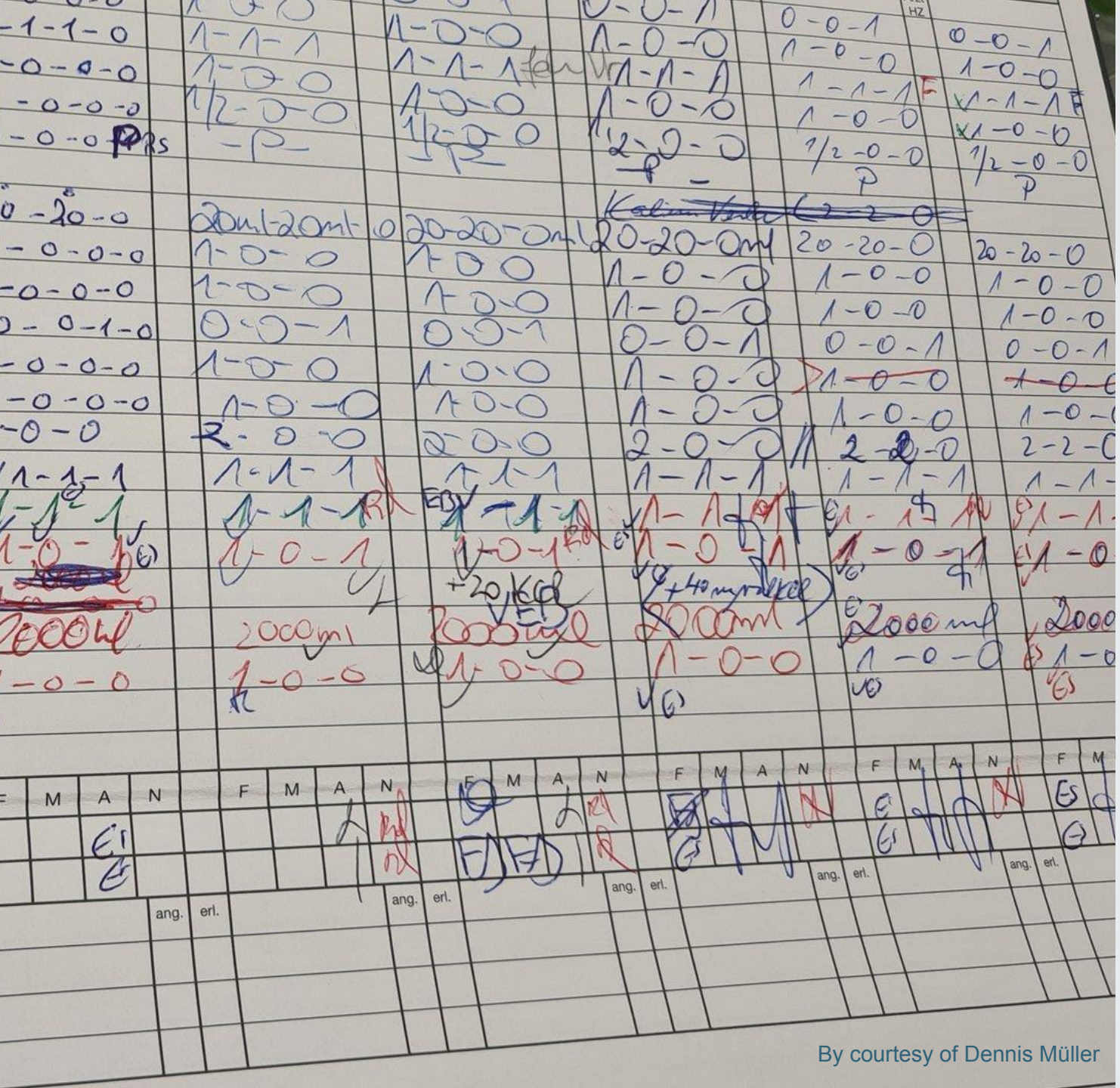
Eidgenössisches Departement des Innern EDI
Bundesamt für Gesundheit BAG
Bundesamt für Statistik BFS

DigiSanté

Fostering digital transformation in the Swiss healthcare system

Dr Katrin Crameri, MPH
Co-lead DigiSanté
Digital Transformation Division, Federal Office of Public Health
Department of Home Affairs

Thursday, 31. October 2024

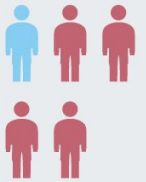


By courtesy of Dennis Müller

IMPRECISION MEDICINE

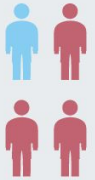
For every person they do help (blue), the ten highest-grossing drugs in the United States fail to improve the conditions of between 3 and 24 people (red).

1. ABILIFY (aripiprazole)
Schizophrenia



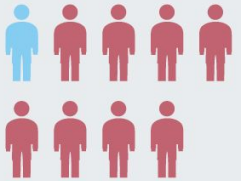
2. NEXIUM (esomeprazole)
Heartburn

3. HUMIRA (adalimumab)
Arthritis



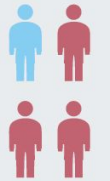
4. CRESTOR (rosuvastatin)
High cholesterol

5. CYMBALTA (duloxetine)
Depression

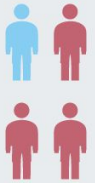


6. ADVAIR DISKUS (fluticasone propionate)
Asthma

7. ENBREL (etanercept)
Psoriasis



8. REMICADE (infliximab)
Crohn's disease



9. COPAXONE (glatiramer acetate)
Multiple sclerosis

10. NEULASTA (pegfilgrastim)
Neutropenia

Based on published number needed to treat (NNT) figures. For a full list of references, see Supplementary Information at go.nature.com/4dr78f.

https://www.nature.com/articles/520609a

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Digital transformation in the Swiss health system

Establish **standards, specifications and infrastructure** that allow for the seamless and comprehensive exchange of data

Enable the broad use of a secure **Swiss Health Data Space** for all stakeholders

Improve public services and the secure and responsible **secondary use of health data** for planning, management and research purposes

Programme duration: 10 years (2025 to 2034)

Programme start: January 2025

Guarantee credit: CHF 392 million

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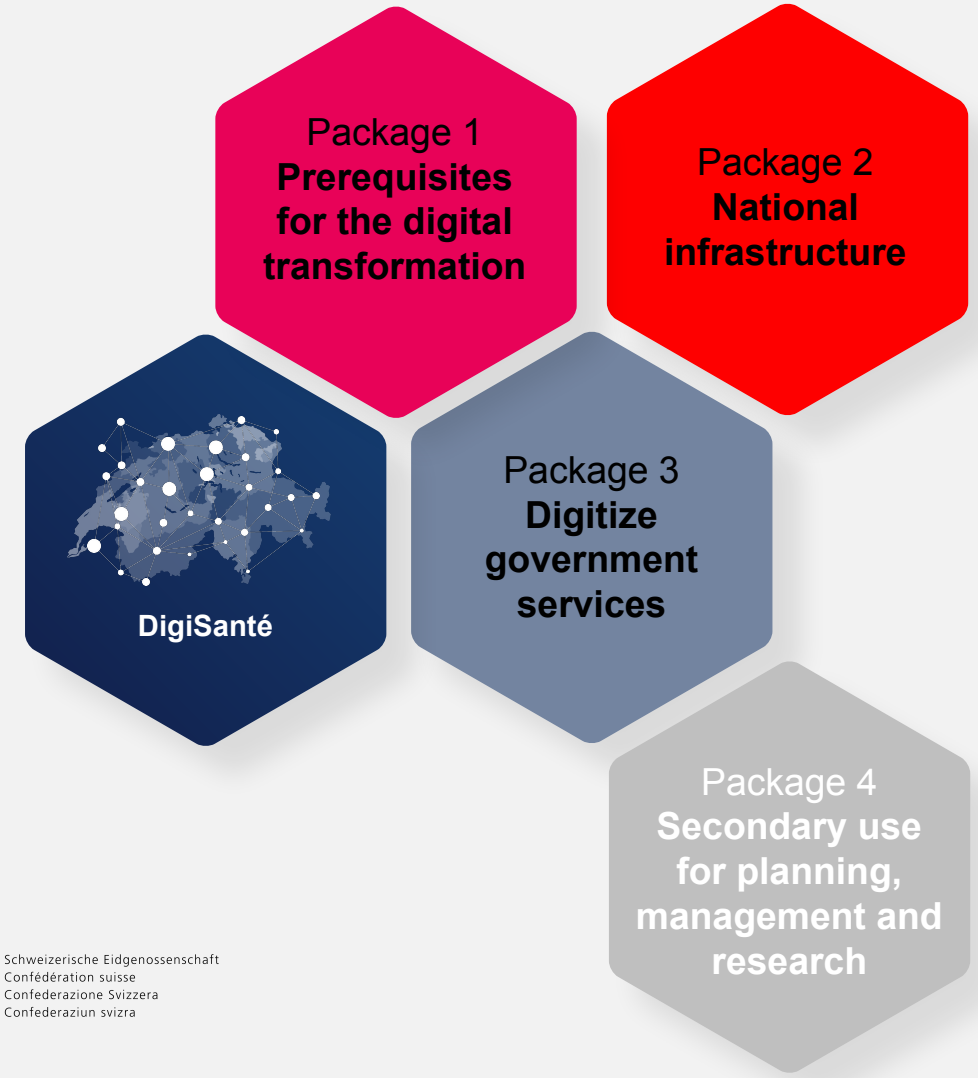
Digital transformation in the Swiss health system



Four strategic goals:

- Orchestration
- Digitisation
- Standardisation
- Legislation

Areas of influence:

- Treatment (eHealth)
- Billing (eBilling)
- public authorities/reporting systems (eGovernment)
- Secondary use of data (eResearch)

Programme organisation

Programme committee

Steering committee, programme management, GDK-CDS, BIT-OFIT, BK-DTI/ChF-TNI, EFV-AFF[selectively]

Steering committee

General Secretariat GS-DFHA
Directors of the FOPH and FSO

Stakeholder committee (Branchengremium)

Based on the business regulations

It is to be a joint programme in close cooperation with stakeholder representatives

Programme management

Co-Heads of the FOPH Digital Transformation division

(Deputy) Head of the FSO Health and Social Affairs division

Specialist group for data management in the healthcare sector

Incl. its working groups

Projects in all packages

Specialist committees

The affected stakeholders for each project

Legally mandated information sharing

Legal requirements regarding data transmission

§ **Cancer Registration Act KRG/LEMO**

§ **Transplantation Act**

§ **Health Insurance Act KVG/LAMal**

§ **Epidemics Act EpG/LEp**

§ **Act on the Electronic Patient Register EPDG/LDEP**

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Stand-alone software tools with diverse requirements

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Stand-alone software tools with diverse requirements

Data providers enter/deliver data into multiple front-ends of various tools

Hospitals | Doctors | Labs | Children's H | Insurances | Cantons | ...

Legally mandated information sharing

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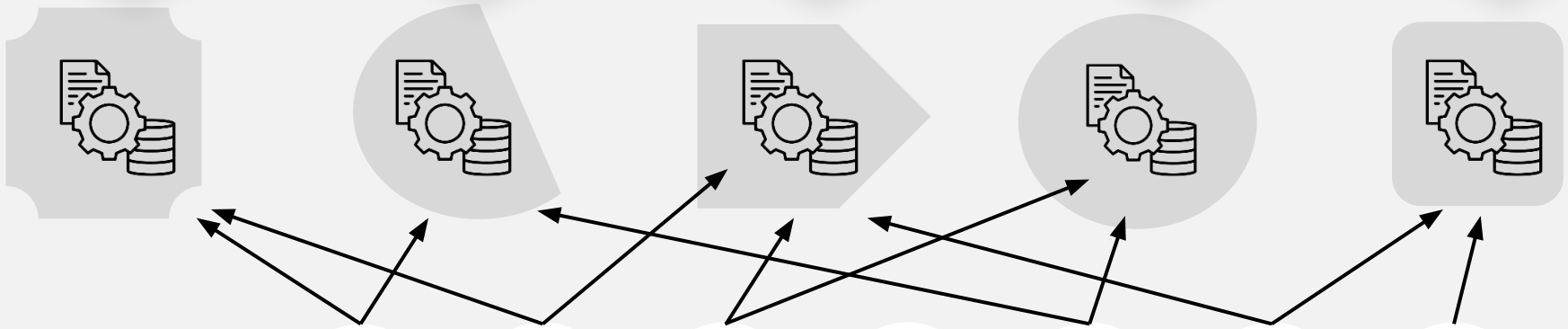
Stand-alone software tools with diverse requirements



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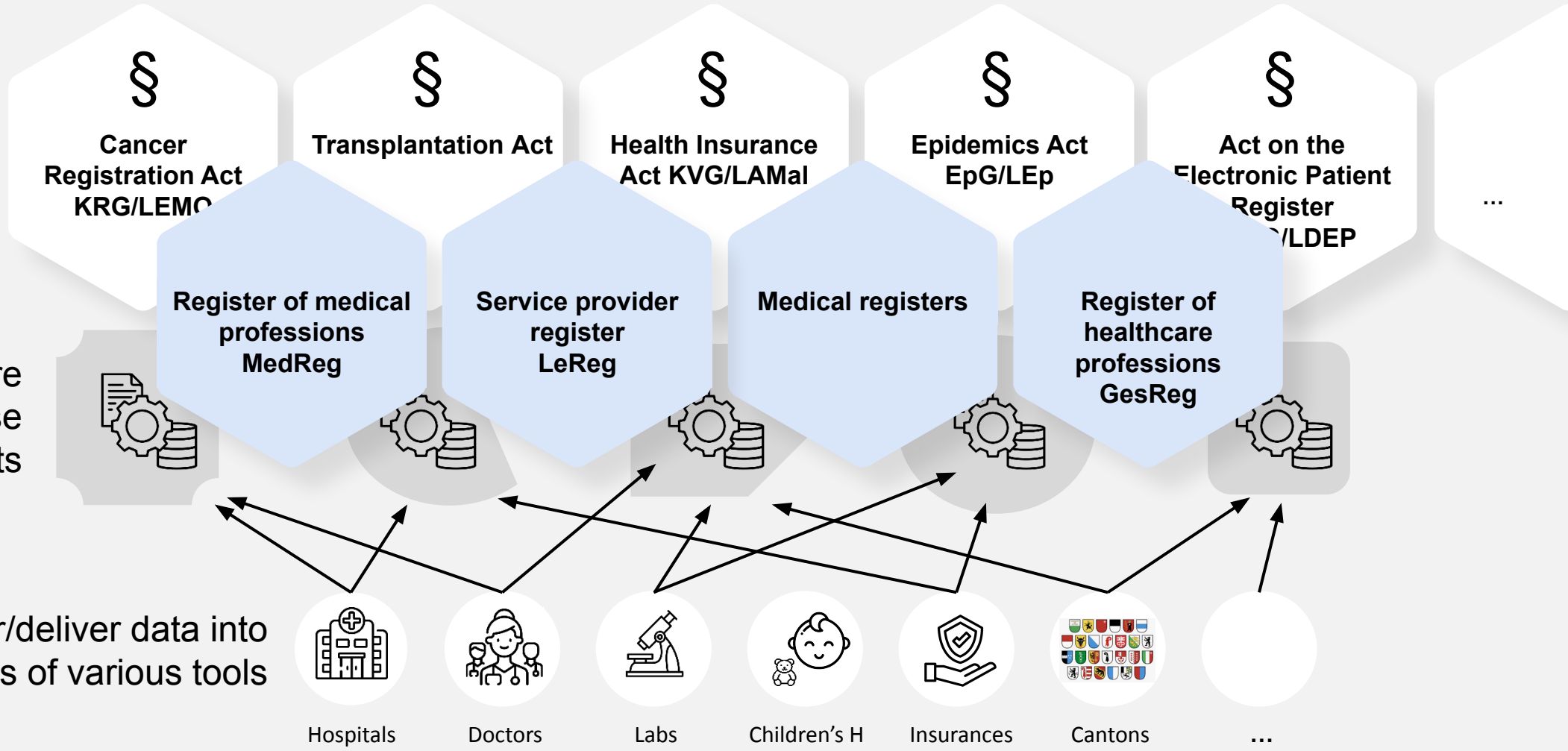

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Package 3
Digitize government services

Cross-sectional legislation regarding IT infrastructures and services for eHealth solutions

Use special laws only for issues not covered by cross-sectional digital legislation

§ **Cancer Registration Act KRG/LEMO**

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§ **Health Insurance Act KVG/LAMal**

§ **Epidemics Act EpG/LEp**

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DigiSanté

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Standardized digital product development according to scaled agility principles

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SAFe®

DigiSanté

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...

SAFe®

Hospitals

Doctors

Labs

Children's H

Insurances

Cantons

...

DigiSanté

Package 3
Digitize government services

Cross-sectional legislation regarding IT infrastructures and services for eHealth solutions

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Standardized digital product development according to scaled agility principles

Standard requirements for data, exchange formats and interfaces

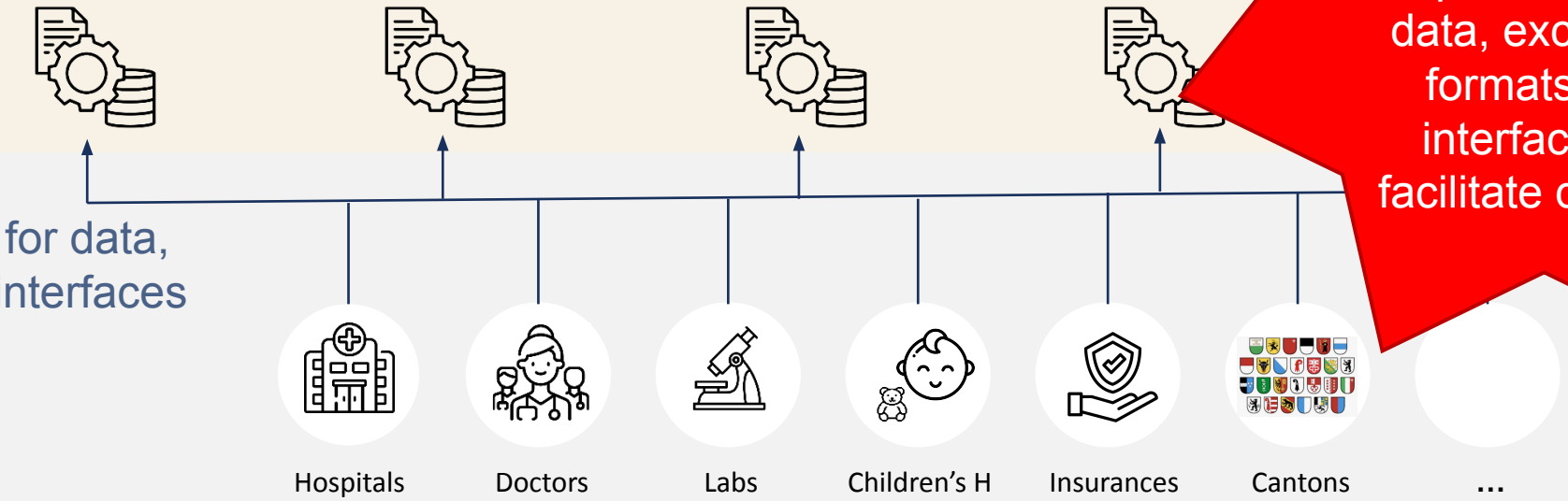
§ **Cancer Registration Act KRG/LEMO**

§ **Transplantation Act**

§ **Health Insurance Act KVG/LAMal**

§ **Epidemics Act EpG/LEp**

§ **A**



Implement harmonized standard requirements for data, exchange formats and interfaces to facilitate delivery

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Package 3
Digitize government services

Cross-sectional legislation regarding IT infrastructures and services for eHealth solutions

Use special laws only for issues not covered by cross-sec… …al

S…

Stan… …or data, excha… …nterfaces

Implement harmonized standard requirements for registers; provide register-related IT infrastructure and services

§ Cancer Registratio…

§ …nsplantation A…

§ …alth Insuranc… Act …

§ …pidemics Act … G/LE…

§ Act on the …nic Patient …ister …/LDEP

…

Register of medical professions MedReg

Service provider register LeReg

Medical registers

Register of healthcare professions GesReg

SAFe®

Hospitals | Doctors | Labs | Children's H | Insurances | Cantons | …

Standardisation in health care

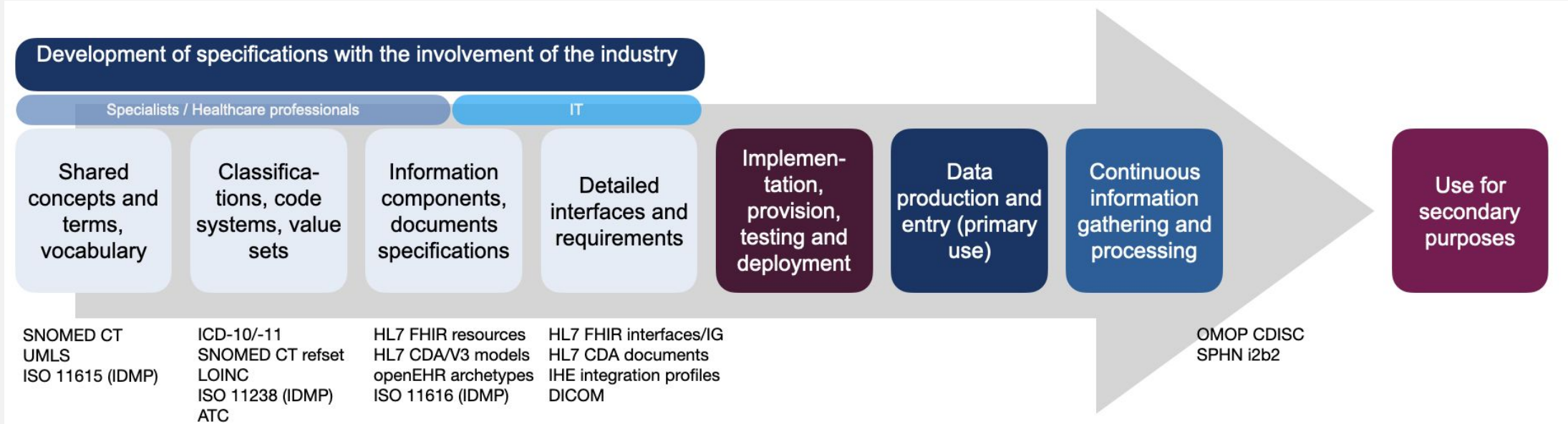
Package 1
Prerequisites for the digital transformation

Standardisation of:

- Technical interfaces
- Data models
- Semantics
- Processes

The use of standards serves practical purposes:

- Accelerating the implementation of interfaces for information exchange
- Reduced maintenance
- Improved integration of data exchange in the processes used
- Higher level of process and data exchange automation
- Increased data quality in all aspects



Basierend auf: https://pub.norden.org/temanord2024-514/index.html

Standardisation in health care

Package 1
Prerequisites for the digital transformation

Standardisation of:

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- Reduced maintenance
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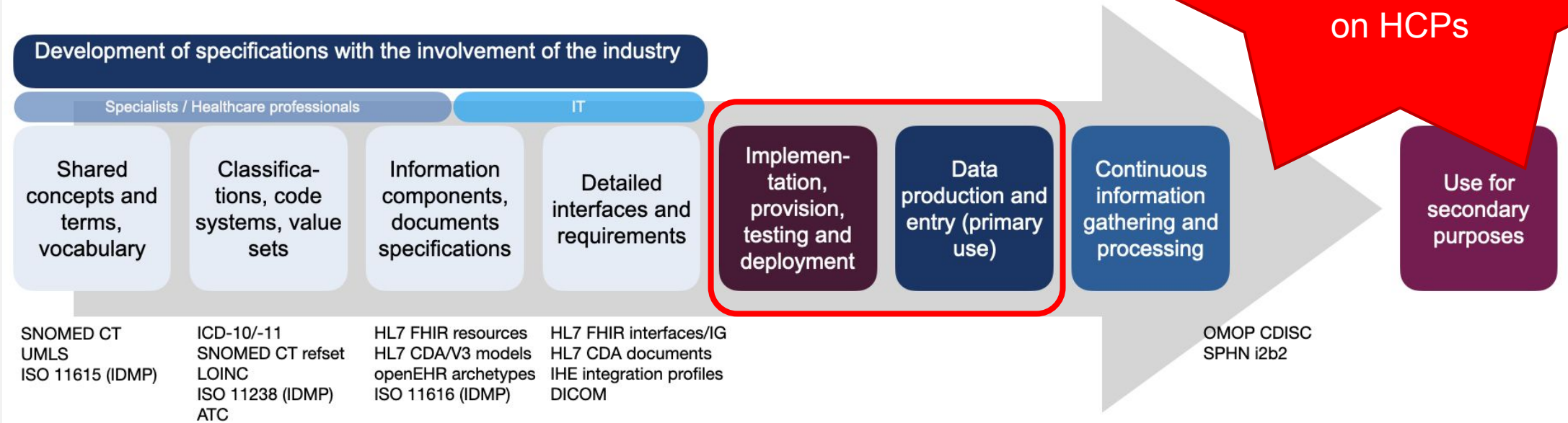
- Higher level of process and data exchange au
- Increased data quality in all aspects

Define & enforce requirements for primary IT systems; more automation to relieve the burden on HCPs



Basierend auf: https://pub.norden.org/temanord2024-514/index.html

Standardisation in health care

ehealthsuisse
Kompetenz- und Koordinationsstelle
von Bund und Kantonen

Package 1
Prerequisites for the digital transformation

eHealth

- Rezept
- Medikation
- Impfungen
- Allergien
- Austrittsbericht
- Zuweisung
- Laborauftrag und Befund
- Radiologieauftrag und Befund
- ...

eGovernment

- Krankenhausstatistik
- Strukturdaten Arztpraxen und ambulante Zentren (MAS)
- Statistik der sozialmedizinischen Institutionen (SOMED)
- Statistik der Hilfe und Pflege zu Hause (Spitex Register)
- Medizinische Statistik der Krankenhäuser
- Patientendaten Spital ambulant
- KVG Vollzug
- Gesundheitsversorgungsstatistik (GVS)
- ...

eBilling

- Leistungsabrechnung
- Kosten[illegible]che
- Vert[illegible]e

Identification of the biggest pain points; which data flows need to be made seamless and what is needed to do so?

eResearch

- SPHN
- Forschung Apotheken
- Klinische Forschung
- Health Management Studien
- Health Policy Studien
- Pharma Studien
- ...

Based on: Results of the FDMG 2023 data space working group & eHealth Suisse 2028 master plan

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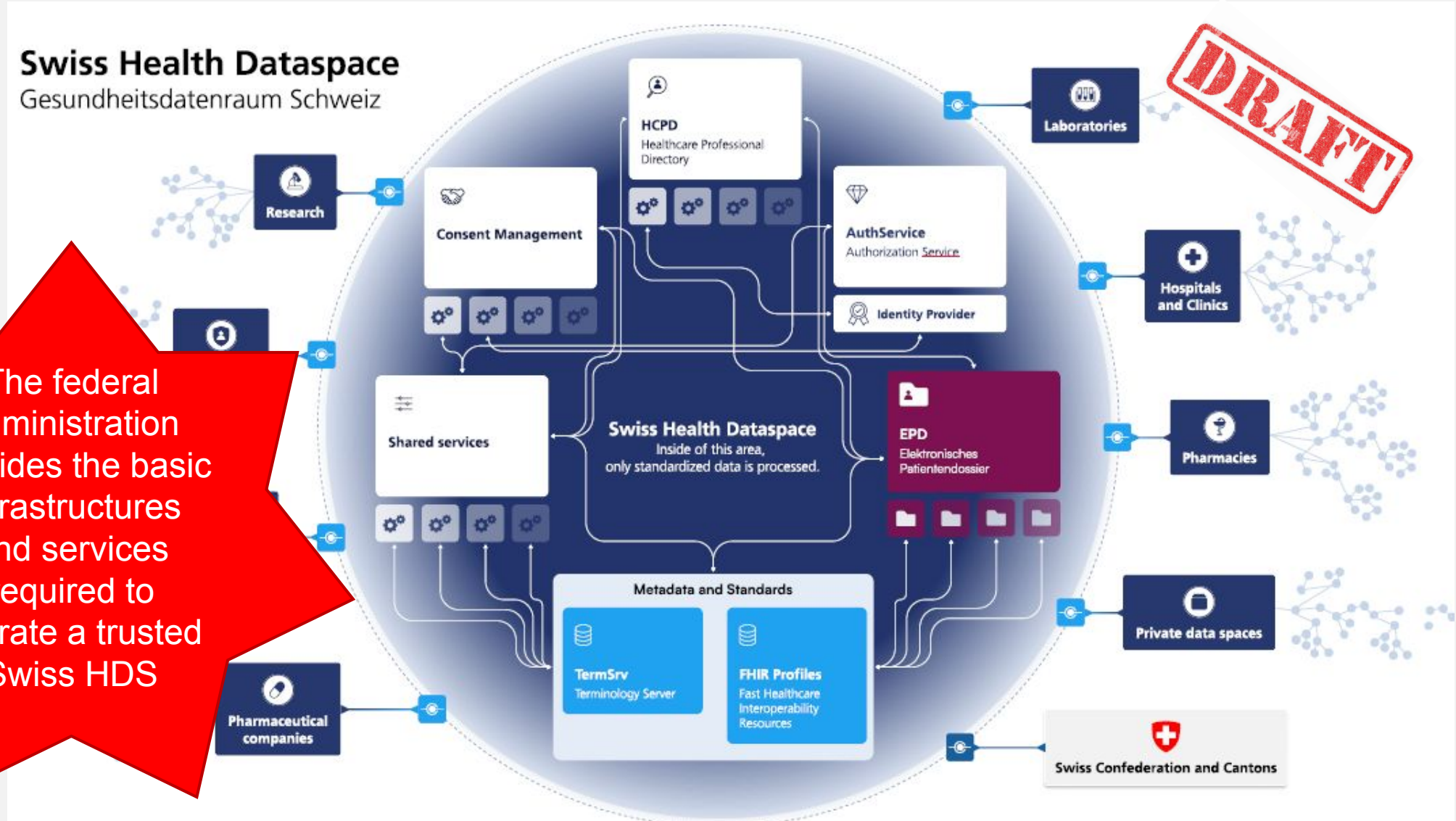
Swiss Health Data Space: Vision

Package 1
Prerequisites for the digital transformation



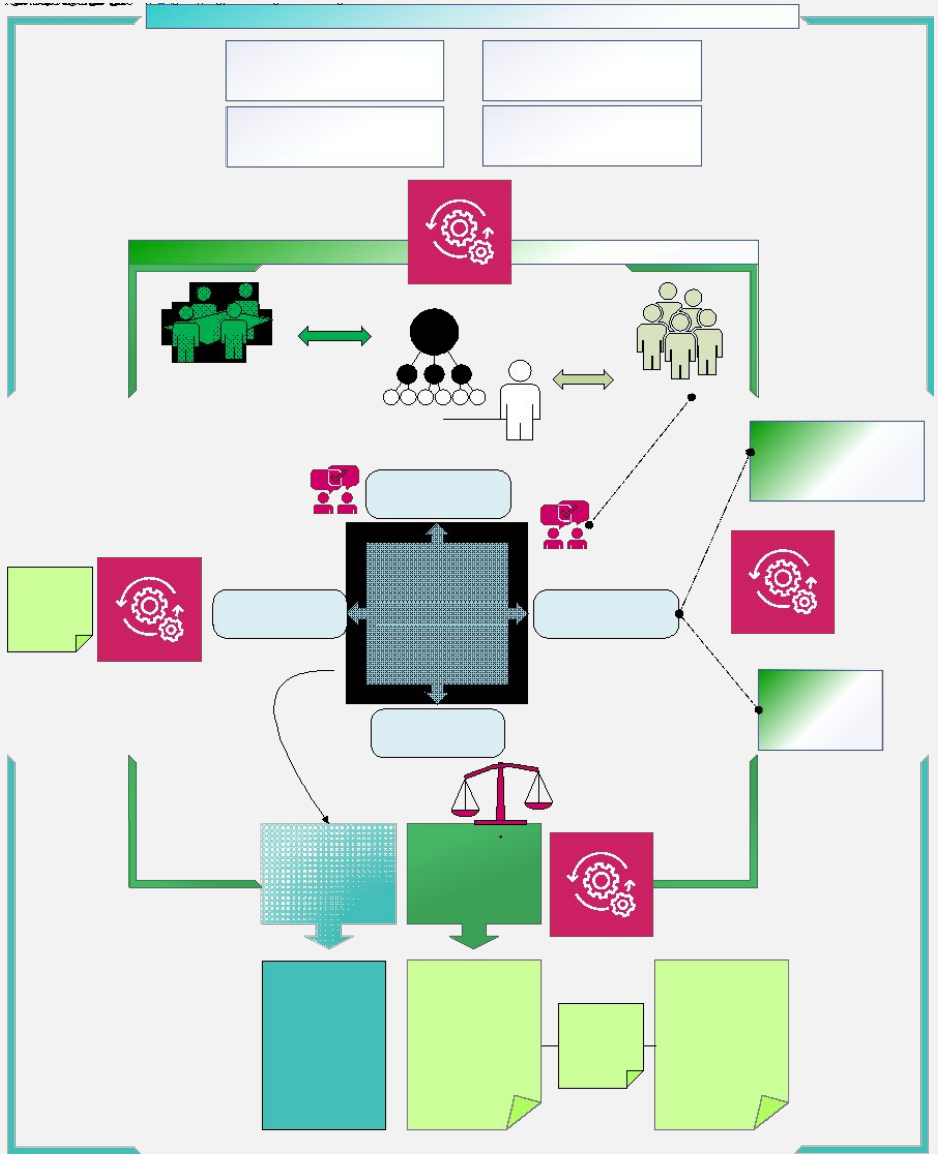
The federal administration provides the basic infrastructures and services required to operate a trusted Swiss HDS

Secondary use of data

A Health Data Space in support of health-related secondary data use (Po Report Humbel 15.4225): For research and other secondary use cases

Important, necessary components:

- Unique identifier (concept finalized; risk assessment and data protection impact assessment follow)
- Trust center/data coordination center for data linkage and preparation (de-id, pseudonymization)
- National consent management service for research
- Framework law on secondary use of health data (Mo 22.2890)



Secondary use needs FAIR DATA…

Package 4
Secondary use for planning, management and research

… but data alone is not enough!

For a functioning data ecosystem and broad use of health data in research and innovation, there is a need for:

- An amendment of the existing legal bases with a view to simplifying the possibilities for use for secondary purposes (of existing data collections)
- New legal basis for a broad secondary use of health data (also outside HRA)
- Scalable and sustainable core infrastructures (and their funding)
- Public acceptability
- Close coordination at national and international level
- A smart governance framework, and a WILLINGNESS TO SHARE!

Thank you
for your attention

@CrameriKatrin

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Katrin.Crameri@bag.admin.ch
Digisante@bag.admin.ch

DigiSanté

DigiSanté explanatory film (available in German, French and Italian)

DigiSanté website (available in German, French and Italian)

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