



Swiss
Personalized
Health
Network

@SIMED – Unige/HUG



Christian Lovis MD MPH

L4CHLAB

LOINC FOR SWISS LABORATORIES



| A | B | C | D | E | F | G | H | I | J | K | L | M | |
|---------|-----|---------------------------------|----------------|------------|-------------|------|---------------------------------|----------------|------------|-------|----------|-----------|---------------------|
| LOINC | HUG | Analyse | Matériau | OFAS | Labo HUG | ICHV | Analyse | Matériau | OFAS | INSEL | Nr. Ana. | Kbz. Ana. | Analyse |
| 10333-3 | ok | Aspect (LCR) | LCR | 1766 | LIQBIO | ok | Aspect (LCR) | LCR | 1766 | ok | 249 | BESVZ | VDR Zentrifugation |
| 10501-5 | ok | LH (Lutrophine) | Sang | 1542 | CHIMURG | ok | LH (Lutrophine) | Sang | 1542 | ok | 2130 | LH | LH |
| 11580-8 | ok | TSH | Sang | 1718 | CHIMURG | ok | TSH | Sang | 1718 | ok | 2005 | TSH | TSH |
| 12736-5 | ok | Acide hyaluronique | Sang | Hors liste | RQUAL | ok | Acide hyaluronique | Sang | Hors liste | ok | 2970 | HYA | Hyaluronat |
| 13539-2 | ok | Phosphate (Urine) | Urine, récolti | 1602 | CHIMURG | ok | Phosphate (Urine) | Urine, récolti | 1602 | ok | 323 | PI-U | Anorg. Phosphat |
| 14566-4 | ok | Calcitriol (Vitamine D 1,25-OH) | Sang | 1000 | RQUAL | ok | Calcitriol (Vitamine D 1,25-OH) | Sang | 1000 | ok | 2430 | 1.25D | 1,25-Dihydroxy-Vit |
| 14590-4 | ok | Vitamine E (alpha tocophérol) | Sang | 1755 | TOX | ok | Vitamine E (alpha tocophérol) | Sang | 1755 | ok | 3517 | Vit-E | Vitamin E (D a-Toc) |
| 14631-6 | ok | Bilirubine totale | Sang | 1207 | CHIMURG | ok | Bilirubine totale | Sang | 1207 | ok | 69 | Big | Bilirubin gesamt |
| 14646-4 | ok | HDL-Cholestérol | Sang | 1410 | CHIMURG (R) | ok | HDL-Cholestérol | Sang | 1410 | ok | 629 | HDL | HDL-Cholesterin |
| 14647-2 | ok | Cholestérol total | Sang | 1230 | CHIMURG (R) | ok | Cholestérol total | Sang | 1230 | ok | 74 | CH | Cholesterin |
| 14665-4 | ok | Cuivre | Sang | 1515 | TOX | ok | Cuivre | Sang | 1515 | ok | 203 | CU | Kupfer |

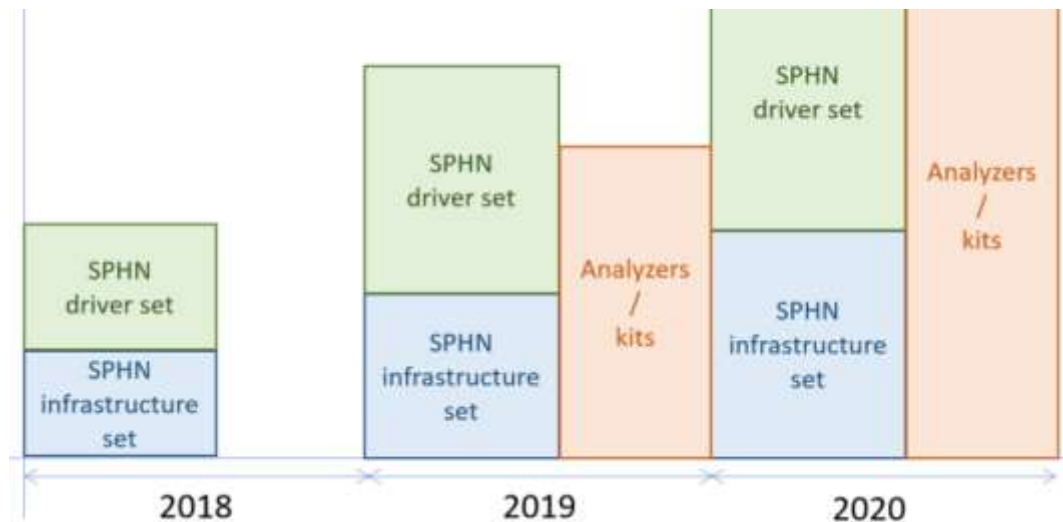
Common mapping > 1'000 analysis – LOINC & BAG/OFSP LA

SPHN DCC Strategy paper and milestones for laboratory

L4CHLAB

LOINC FOR SWISS LABORATORIES

- 1) Enforce LOINC as a common language
- 2) Use LOINC for identifying analysis, not results
- 3) Enforce the classifications, not specific encoding
- 4) Stepwise introduction based on commercially available analyzers/assays kits
- 5) Converging approach between the major SPHN supported initiative
- 6) Accept alternatives encoding when required
- 7) Alignment between care system requirements and R&D bodies and needs
- 8) Governance and sustainability



DE-ID

DEIDENTIFICATION FOR MEDICAL DOCUMENTS



UniversityHospital
Zurich



Hospital adoption friendly strategy for deidentification
explainable
correctable
commitable

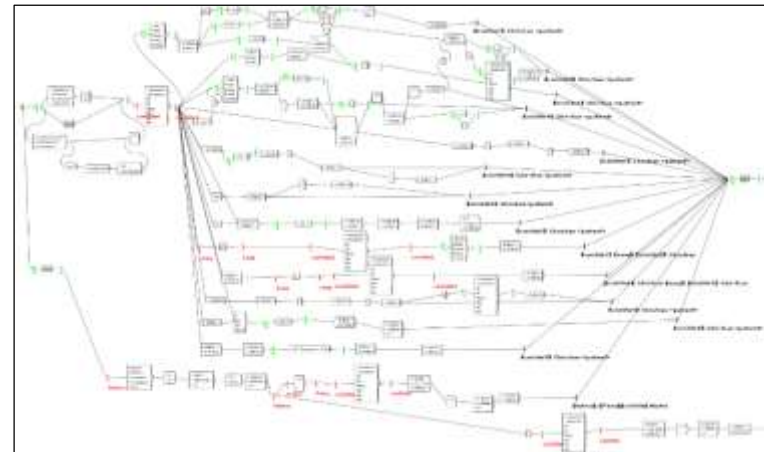
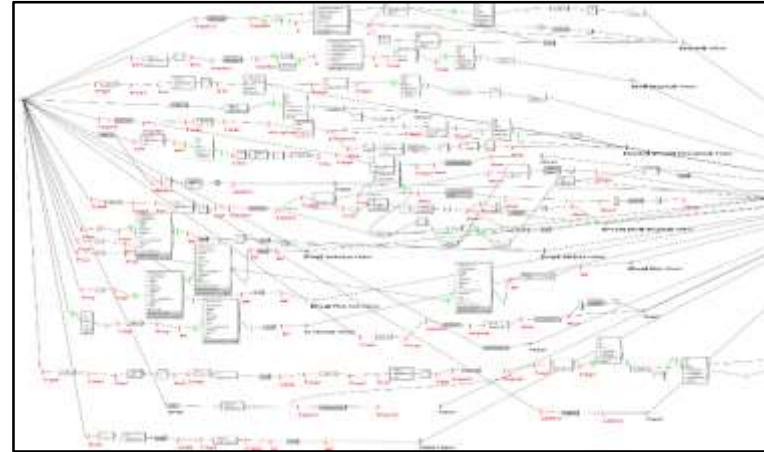
Based on finite state automata

DE-ID

DEIDENTIFICATION FOR MEDICAL DOCUMENTS

- Protected Health Information
- (HIPAA) Privacy Rules:
 - Names (patients, doctors, nurses)
 - Dates
 - Locations (hospitals, clinics, towns, countries)
 - Telephone and fax numbers
 - Names of health insurance companies

- 29 finite state automata delivered to CHUV, USB, USZ, ETHZ

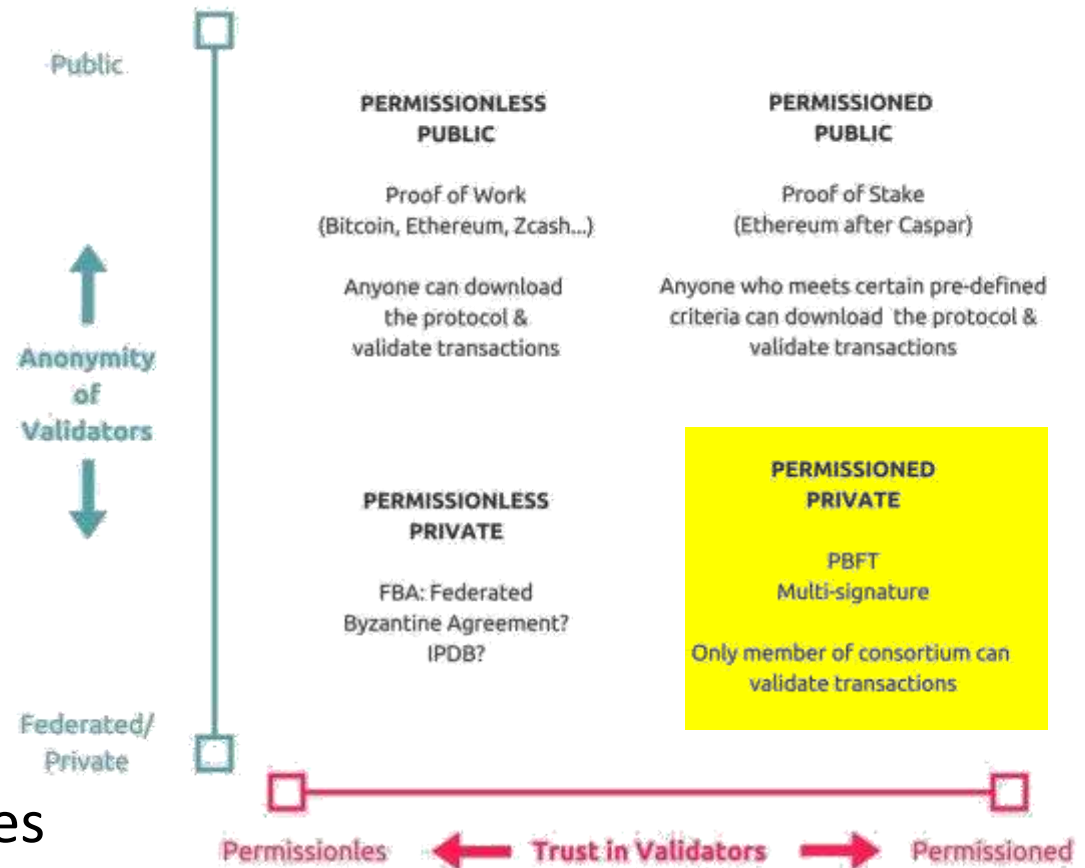


C3-STUDY

CITIZEN CENTERED CONSENT (C3) MANAGEMENT SYSTEM



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



C3-STUDY



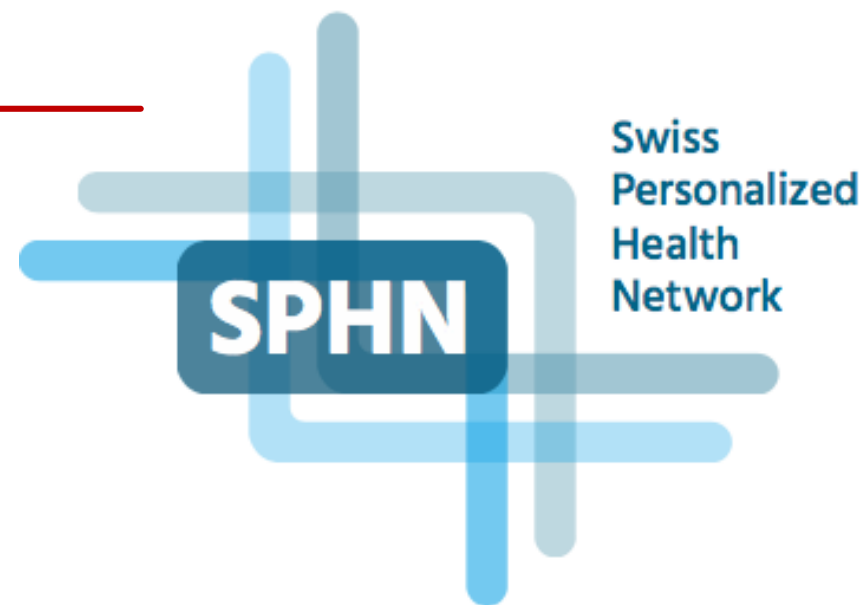
CITIZEN CENTERED CONSENT (C3) MANAGEMENT SYSTEM



- 2016/2017 - Concepts & funding
- 2017 – Compositional model of Consent
- March 2018 – Successful proof-of-concept implementation
 - Detailed use-cases and scenarios
 - Detailed technical specifications
 - Access API definitions
- V1 MVP implementation started expected for 12.2018/01.2019
- 7 trusted authorities foreseen
 - 5 CH university hospitals, SwissEthics, SAMS

MEDICAL INFORMATION SCIENCES

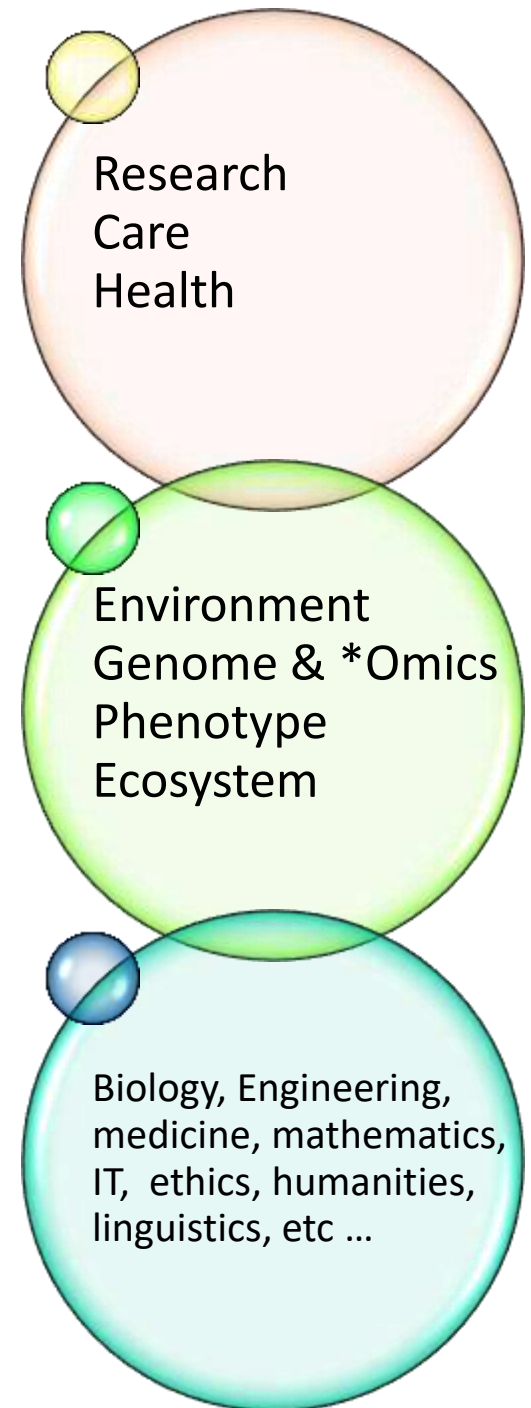
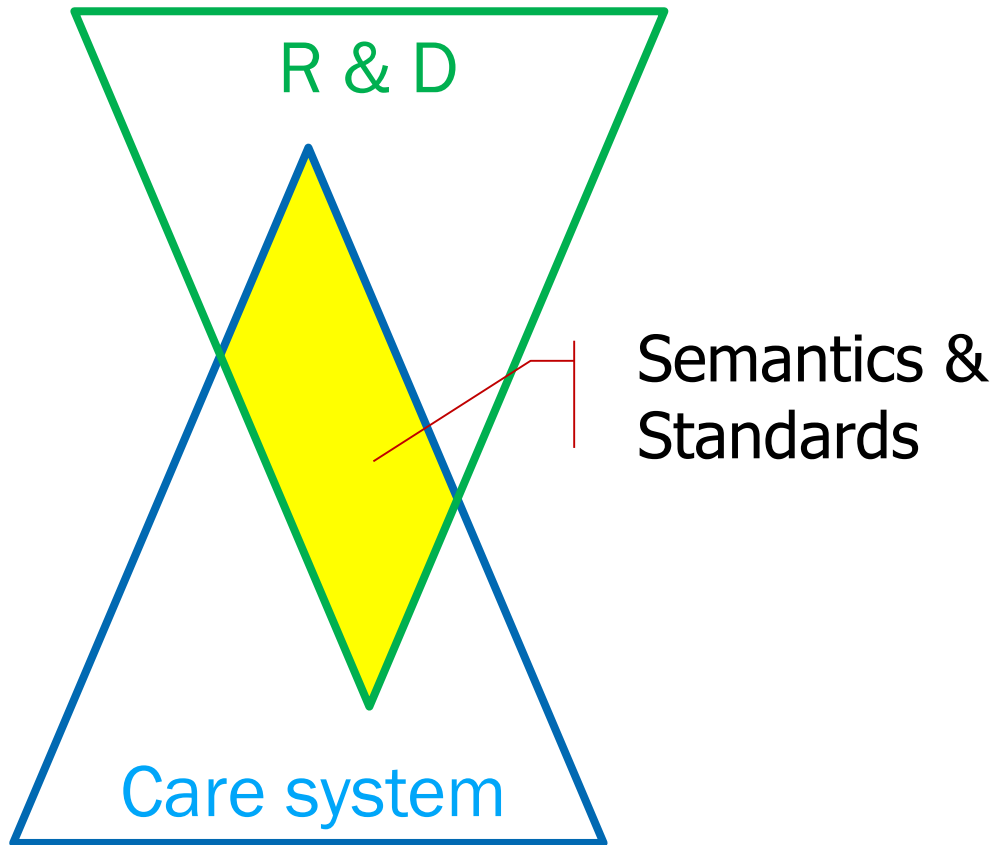
DATA TEAM - DATA RAPTOR



- Data IOP & Semantic WG
 - Concepts
 - Strategy
 - Datasets
- French & German starter language set for SNOMED IHTSDO
- Semantic support for many SPHN projects

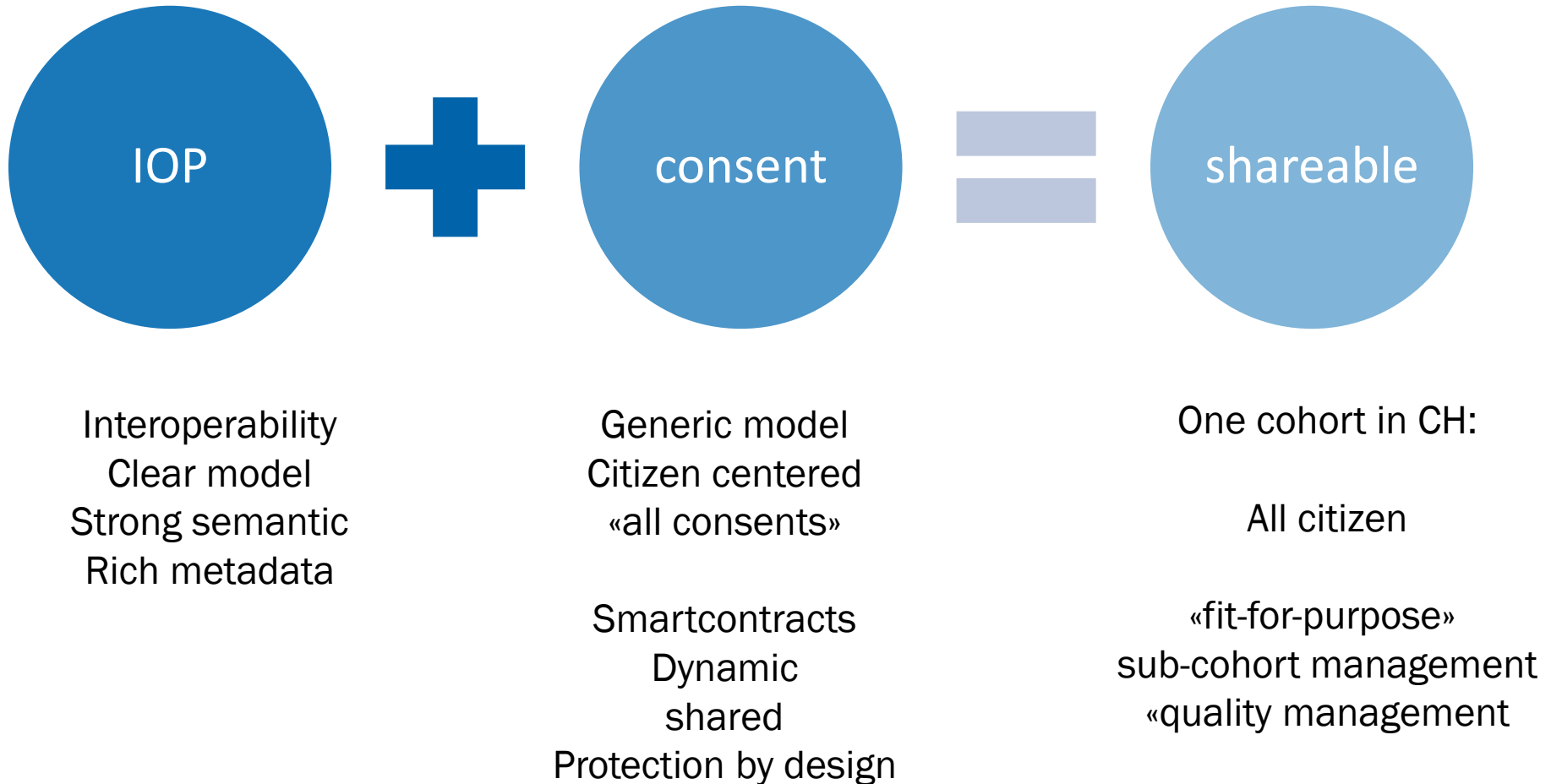
THE PERSONALIZED HEALTH CHALLENGE

CONVERGENCE AND COLLABORATION



SWISS PERSONALIZED HEALTH NETWORK INITIATIVE

DCC - DATA STRATEGY



SWISS PERSONALIZED HEALTH NETWORK INITIATIVE

DCC – DCS-IOP DATA STRATEGY

