



HealthHub Finland

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6.11.2025

**Kanta services
Technical Integration,
Compliance, and
Commercial Impact**

Understanding the ecosystem



The Ministry of Social Affairs and Health (**STM**) defines the laws and legislation (e.g., Client Data Act 703/2023 → 764/2025)



THL Issues orders (*Määräykset*) and handbooks for operational guidelines based on laws and legislation



Develops and maintains the Kanta services that link into THL orders; processes, technical documentation and instructions



Organization and the technical solution; processes, documentation and instructions



Supervises compliance and certification



What is Kanta?



- National health and social care data repository in Finland
- Centralized service for managing and sharing health and social care information
- Document-based system in continuous development
- In production for over 13 years
- Covers ~6,5 million individuals (including deceased and foreign residents)
- Over 3 billion healthcare documents stored
- Average: 461 documents per person
- Integrating and using this data correctly is critical for professionals

User groups

Healthcare service providers

Primary care organizations
Hospital districts
Private healthcare providers

Providers of social services

Pharmacies

Healthcare professionals

eHealth Digital Service Infrastructure

Receivers of medical certificates

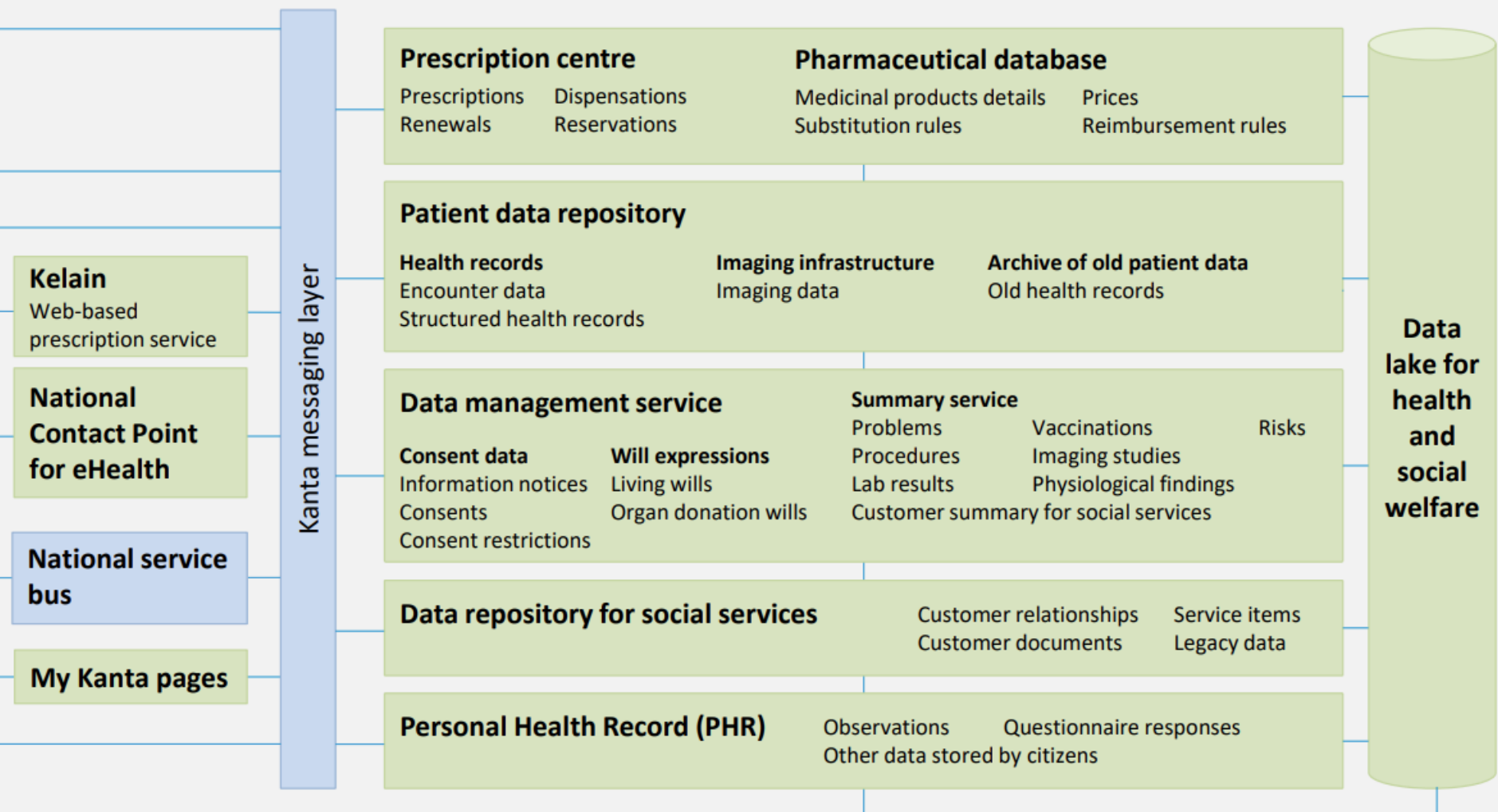
Citizens and apps used by them

Main standards

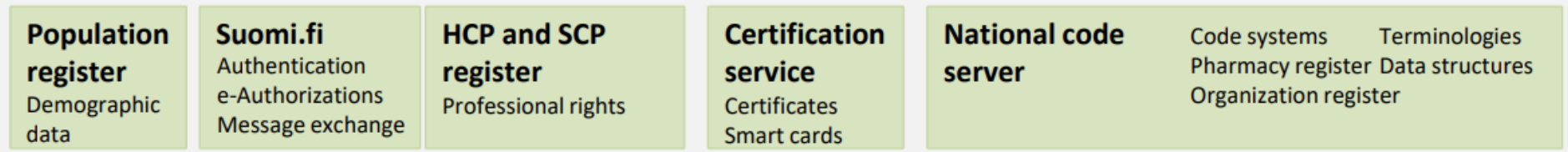
HL7 V3: CDA R2 L3 and Medical Records
HL7 FHIR (Kanta Personal Health Record)
JSON, XHTML (PHR and social services)
PDF/A (old patient data and social services)
IHE IT-I Profiles (imaging and eHDSI)
W3C XML DSig
WS Addressing, WS-I
TLS, X.509

Kanta services

Kanta



Other national services



Complexity

- Many stakeholders, many evolving needs
 - Processes / workflows / use-cases redefinier over time
- Data models and document structures constantly updated
 - Long-term legacy data cannot be ignored
- Move from HL7 CDA R2 into FHIR

Process in a nutshell

1. Develop the software

2. Joint testing

3. Audit

4. Valvira registration

5. Production use start

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- Make the software capable of handling the task at hand!
- Guidelines from Kanta, before continuing the system must:
 - *“meet future production use scope and include planned integrations*
 - *contain functionalities that comply with the requirements for information systems joining Kanta*
 - *comply with open interfaces and standards in accordance with national requirements”*

1. Develop the software

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2. Joint testing

Tests in 3 phases

- Preliminary tests (independently)
 - Kela's test cases (with Kela)
 - Cross-testing (with another system; you'll need to find a partner)
-
- Advisable to reserve time; for a new system starting joint testing from the beginning
~6-12 months
 - Case in point Apotti (Epic), integrations developed since 2016 and first joint test report dated 16.10.2018 and latest dates 8.10.2025

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3. Audit

- Information security assessment (audit)
 - With direct Kanta integration => System classification A2 or A3
 - Higher the level, the more items must be verified
- Audit is based on THL's system form; system profiles and requirements based on the profile selection
- Verification method is informed per requirement;
 - Documentatio
 - Expert interviews
 - System demo (vendor)
 - System testing (auditor)
- Additionally, penetration testing
- Outcome is a certificate, valid for 3 years => re-audit
 - Annual surveillance audit + change audit as needed

1. Develop the software

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4. Valvira registration

- Mechanical phase and final step before production use can start
- Will only take a week or two if everything is in order

1. Develop the software

2. Joint testing

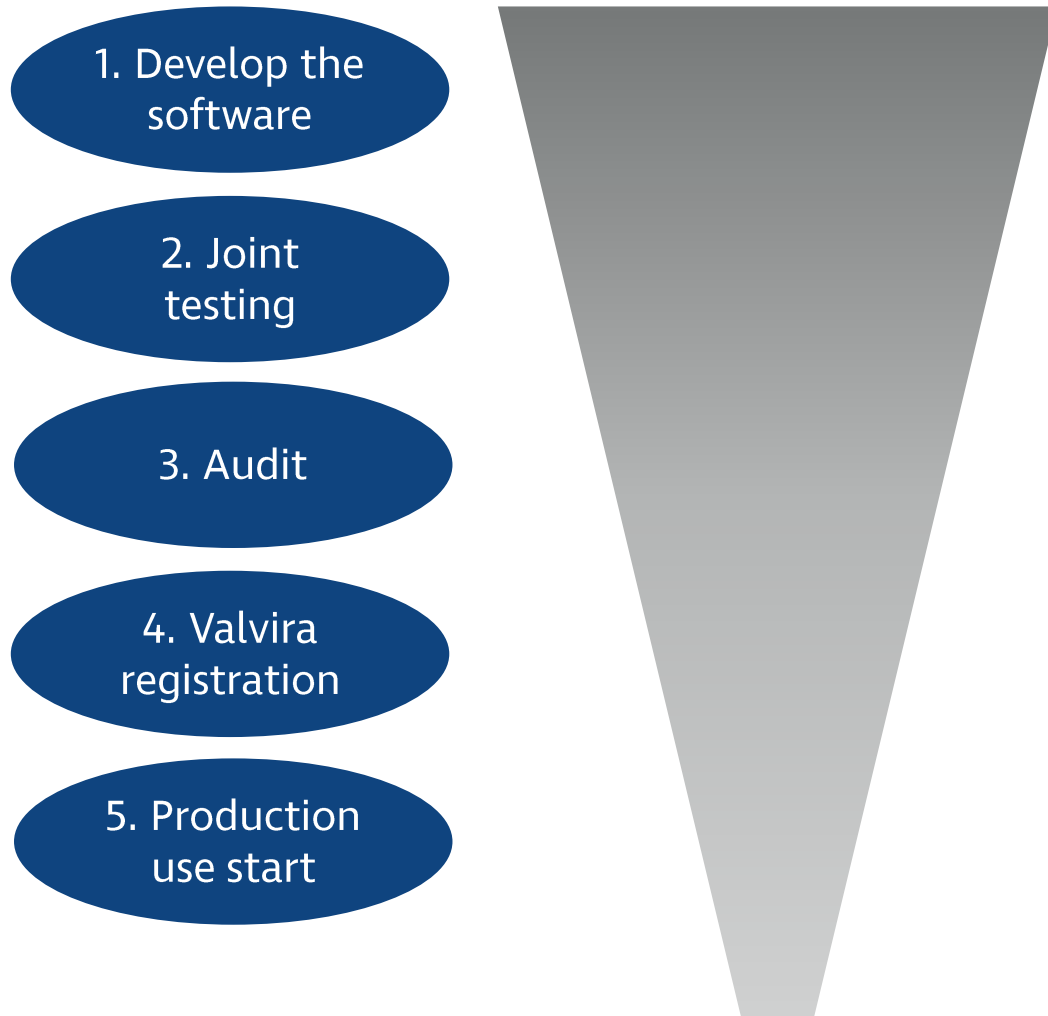
3. Audit

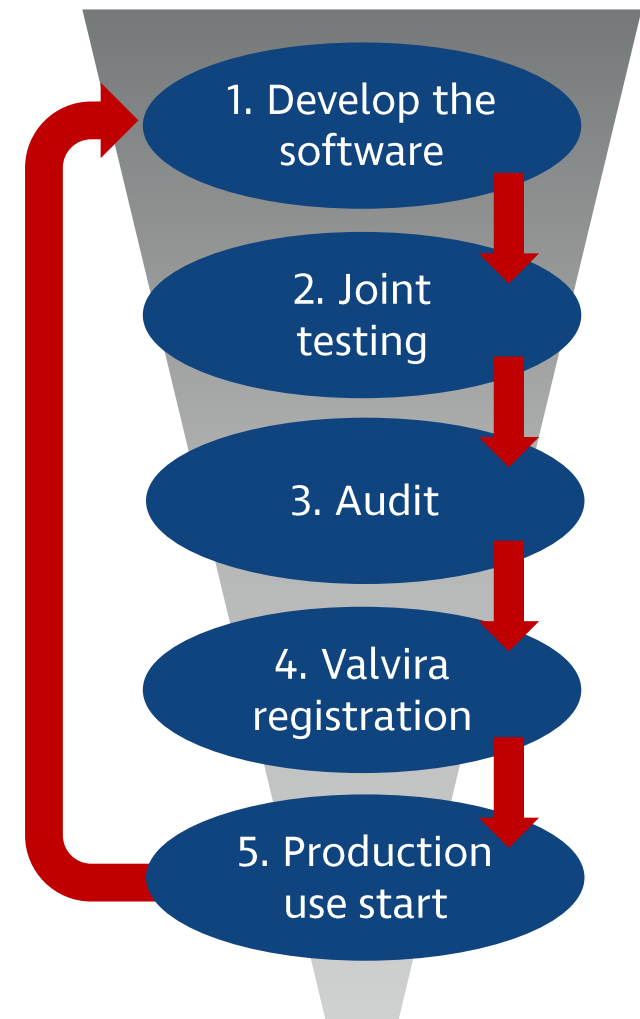
4. Valvira registration

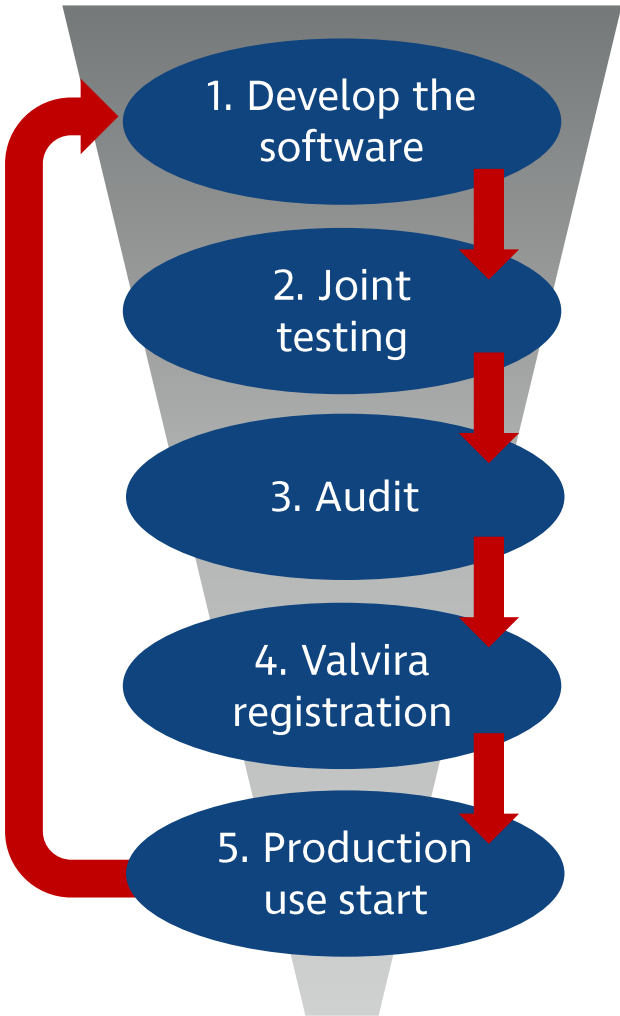
5. Production use start

- Production use start
- Deployment with a healthcare or social care organization
 - The organization must take care of the necessary notifications for authorities and the actual deployment test

Workload and accumulation of costs

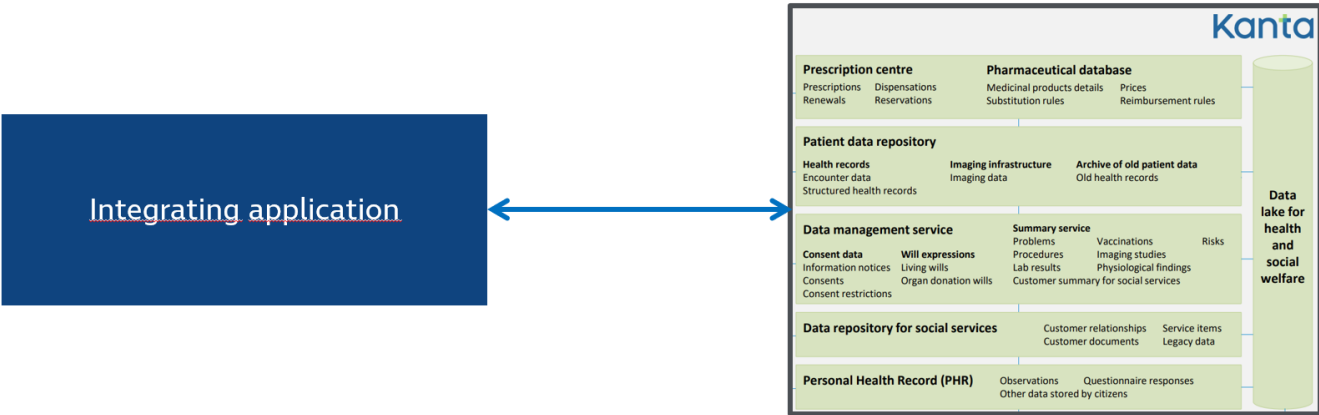


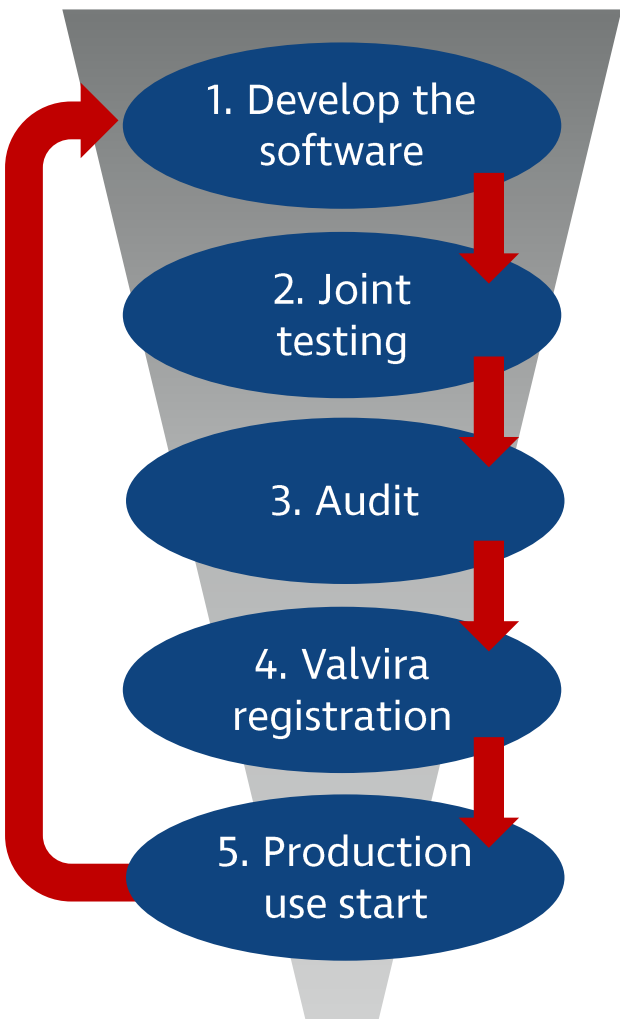




Technical integration to Kanta service

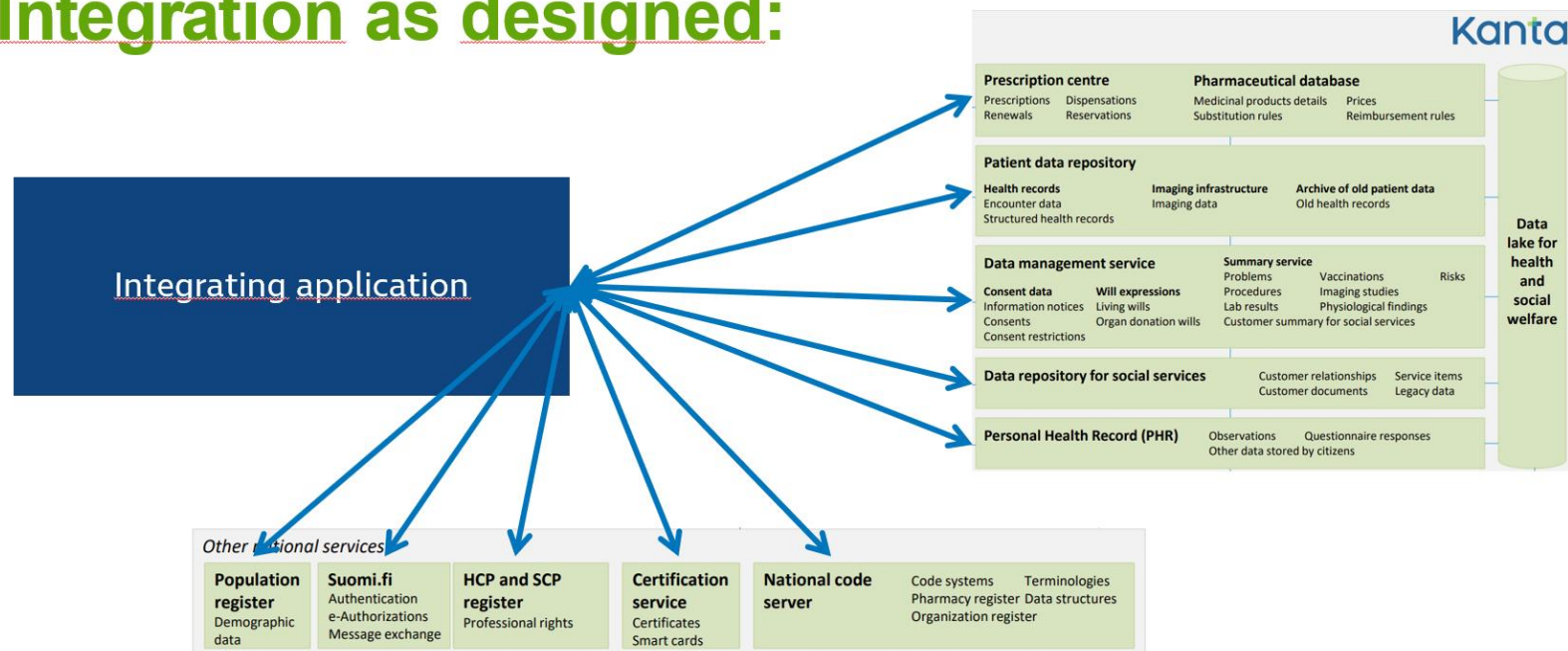
Integration as expected:





Technical integration to Kanta services

Integration as designed:



1. Develop the software

2. Joint testing

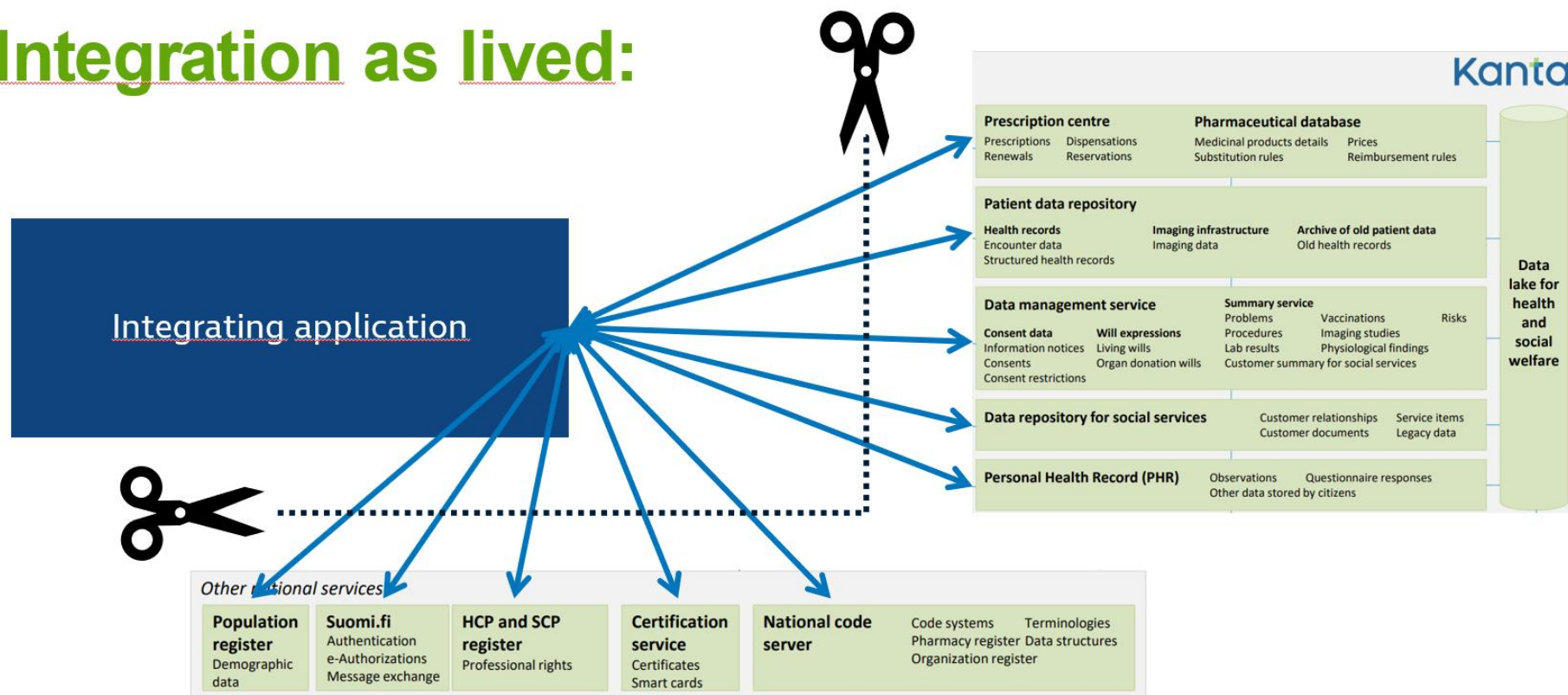
3. Audit

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5. Production use start

Technical integration to Kanta services

Integration as lived:



ATOSTEK ERA

ATOSTEK

Kaikki sote-tiedot helposti

ASIAKKAAN
TIETOJÄRJESTELMÄ



ERA

KANSALLISET SOTE-IT-PALVELUT

Reseptikeskus ja
lääketietokanta

Potilastiedon arkisto

Sosiaalihuollon
asiakastiedon arkisto

Tiedonhallintapalvelu

Omakannan
omatietovaranto

Kuva-aineistojen arkisto

MUUT KANSALLISET PALVELUT

Väestötietojärjestelmä

Terhikki, Suosikki

Suomi.fi

Varmennepalvelut

Kansallinen koodistopalvelu

Kela Kanta



Terveyden ja
hyvinvoinnin laitos



Valvira

Sosiaali- ja terveysalan
lupa- ja valvontavirasto



Suomi.fi



SOSIAALI-JA
TERVEYSMINISTERIO



DIGI- JA
VÄESTÖTIETO-
VIRASTO



12+

Turnover, M€

120+

SW Experts

25+

Years of operation

CERTIFIED
ISO 13485



CERTIFIED
ISO 9001



CERTIFIED
ISO 27001



Contact

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