

enter e-Estonia
the coolest digital society

How to Deliver the Promise of eHealth in a Changing Environment - 'The Estonian Way'

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XB-0461 RIA 10/20

northern Europe's
hub for knowledge
and digital business

population: 1.3 million
area: 45,227 km²
currency: Euro
member of: EU, Eurozone,
OECD,
NATO and Schengen



4 whales of Estonian health system



Earmarked social insurance tax

13% flat rate top-up to all salaries

State responsibility for insurance coverage

Single public purchaser of services
(Health Insurance Fund)

Decentralized provider network

private operators governed mostly by
public entities

Strong primary care

Universal free access;
Every citizen has a family doctor
>50% of outpatient contacts

secure

The safest combination.

confidentiality

ID-card, Mobile-ID
Smart ID, e-Residency

availability

X-Road

integrity

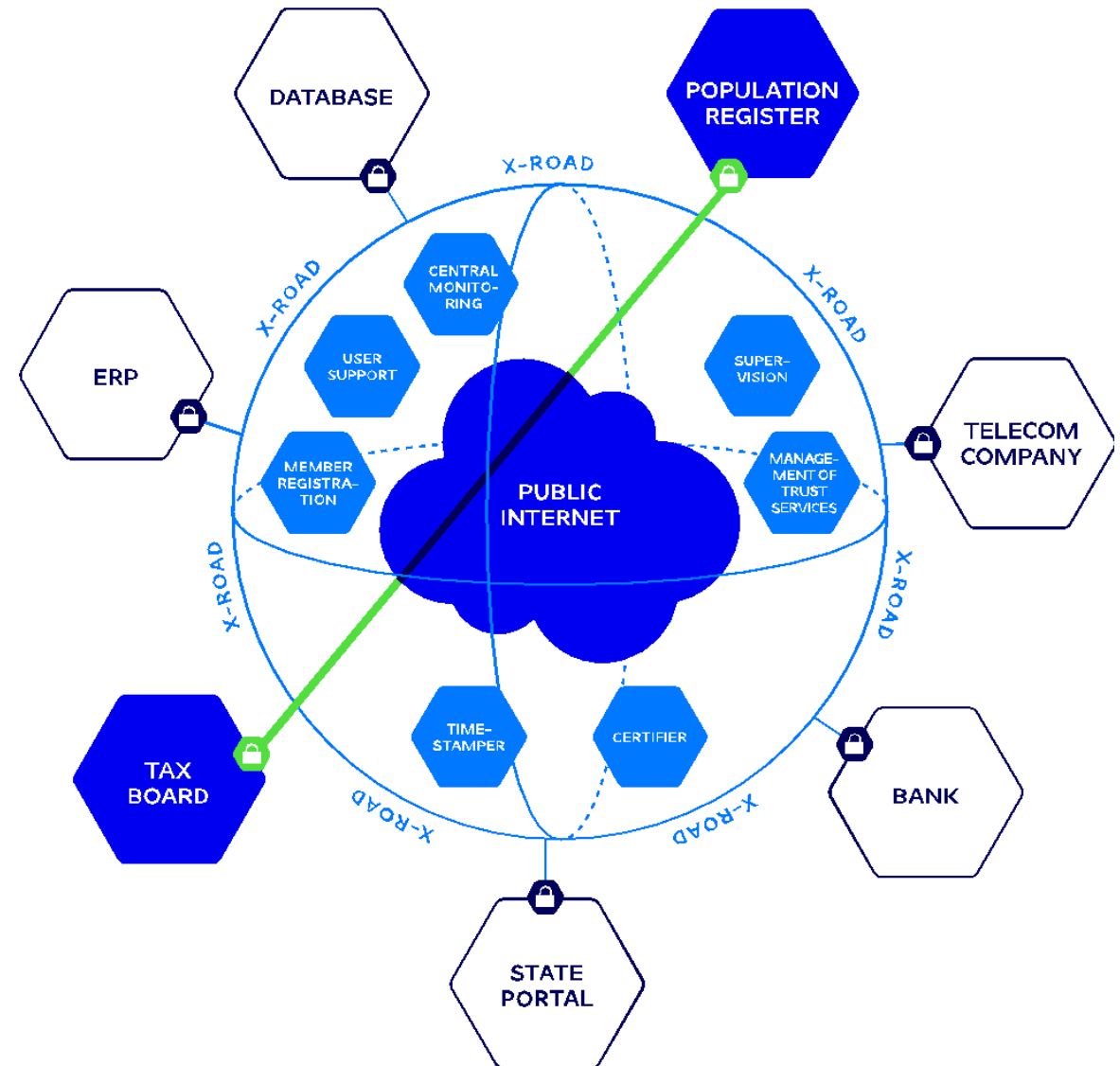
KSI Blockchain

exchange

The busiest highway of e-Estonia – X-Road

X-Road – the free and open-source data exchange layer software

- + modular, easy-to-use, secure data exchange solution
 - + decentralised and distributed network
 - + expert community of almost a thousand people from over 60 countries
-
- + saving 1407 years annually
 - + 52 000 organizations as indirect users of X-Road services
 - + 3000+ different services
 - + over 1.5 billion transactions per year
 - + exported to Finland, Island, Ukraine, Kyrgyzstan, Namibia, Faroe Island and other countries

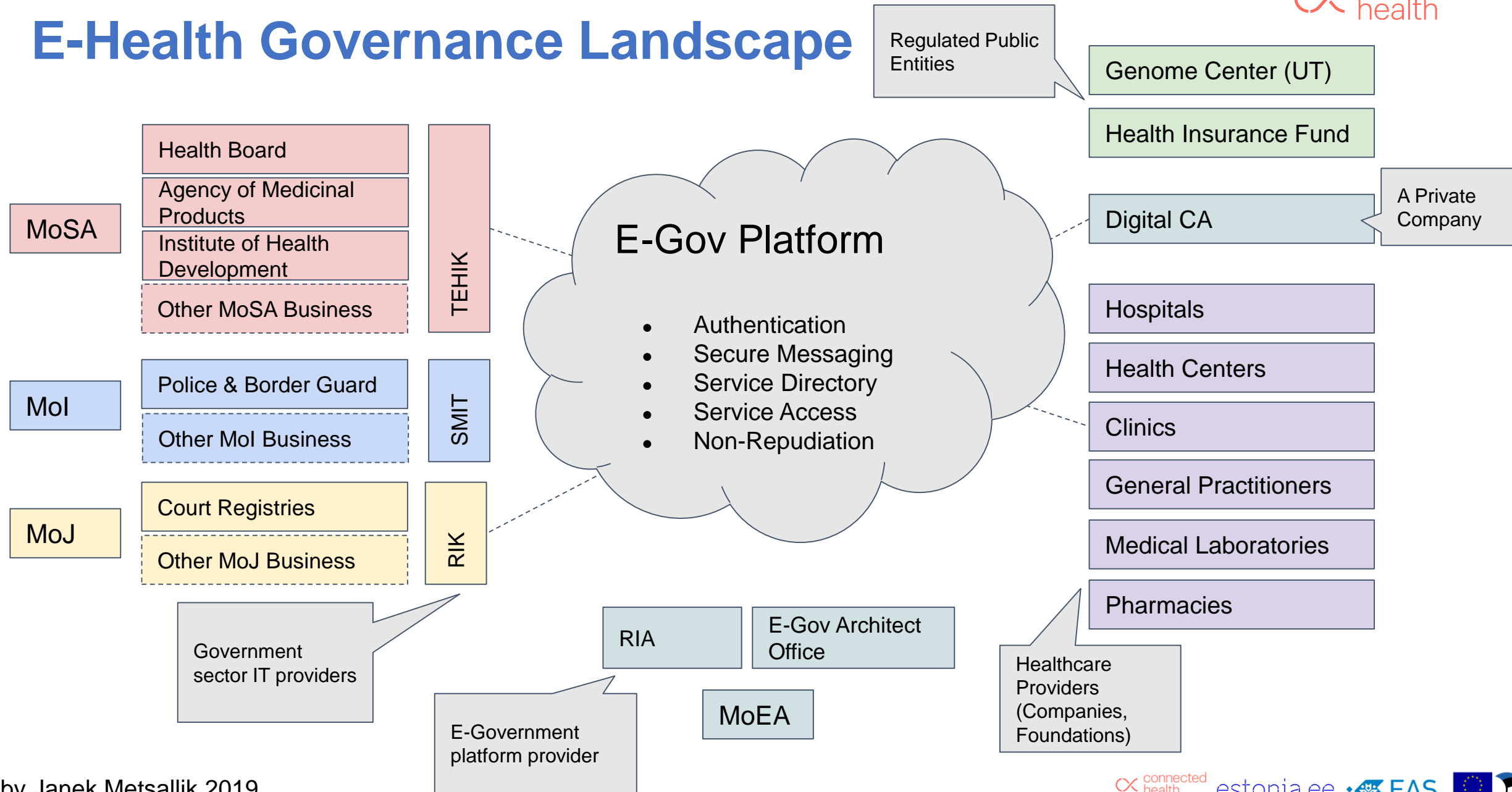


health

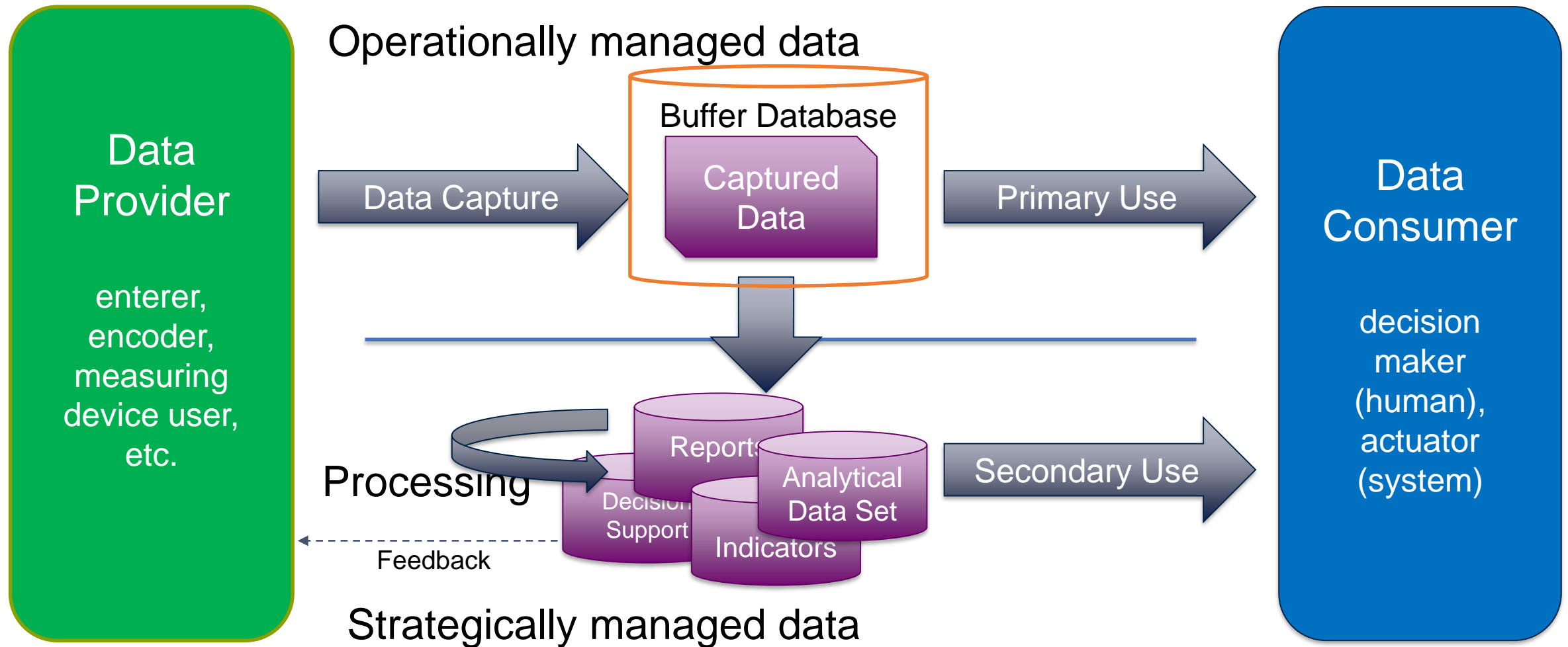
The healthiest system.

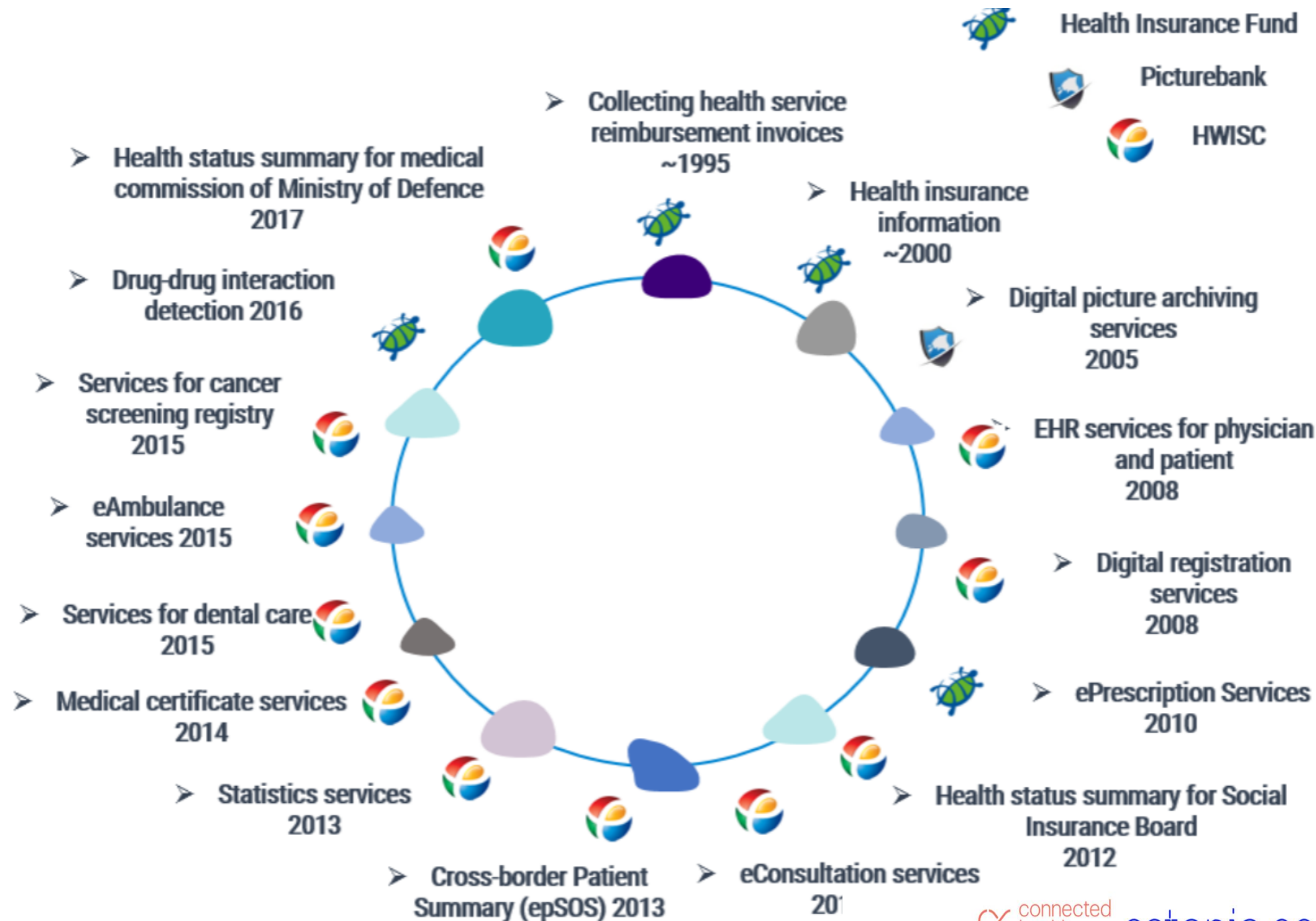
- + digital health data
- + digital prescription
- + e-Ambulance
- + personalised medicine

E-Health Governance Landscape



Health data – strategic resource





My e-Health

My data

Õnne Õöbik

123456789

INSURED**Family doctor:**

dr Anna Park

Phone: 123456789

**YOU HAVE AN INVITATION TO
SCREENING****CORONAVIRUS ANALYSIS
LAB RESULTS****EU DIGITAL COVID
CERTIFICATES****SUBMISSION OF VACCINE
INJURY COMPENSATION DATA****AUTHORISING A NEW
REPRESENTATIVE**

Recent documents

Health data

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notifications](#)[Immunisation notifications](#)[Growth notifications](#)[Examination notifications](#)[Counselling notifications](#)[Examination results](#)[Image references](#)[Referral responses](#)[Working ability assessment](#)

National eBooking system

**COVID-19 VACCINATION**

Invoices submitted to the Estonian Health Insurance Fund

Click on the box to view medical
invoices, click on the information sign
for more information



Statements of intention

Click on the box to view and prepare
statements of intention, click on the
information sign for more information



Managing accesses to health data

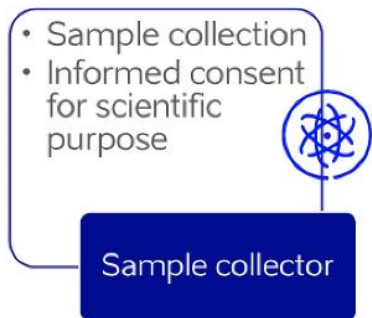
Managing access rights of the
medical committees under the
Estonian Ministry of Defence area of
government. Managing cross-border
access to recipe data. Click on the
information sign for more information.



Notifications

Click on the box to view notifications,
click on the information sign to
receive notifications on your e-mail or
to view additional information

Action plan and partners



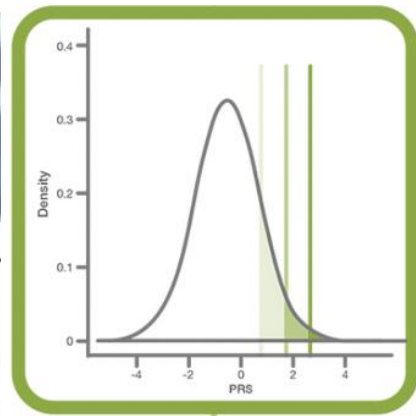
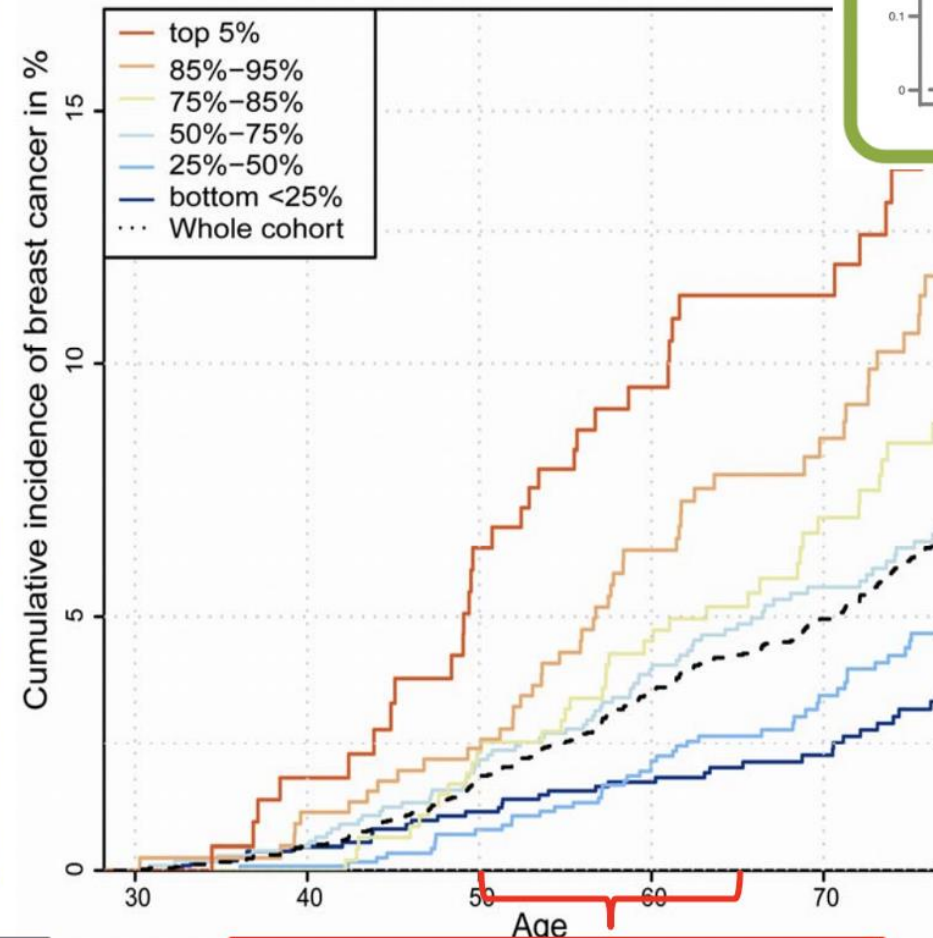
SOTSIAALMINISTEERIUM

First applications in pipeline

Pharmacogenetic recommendations in Estonian ePrescription

Genetic risk score for early detection of breast cancer to enable personalized screening programs

Genetic risk score for the prevention of coronary heart disease and stroke



SOTSIAALMINISTEERIUM

Genetics stratified screening
3x more effective!

State provided mammography
screening programs

lessons learned

- + KISS - keep it short and simple
- + transparency works
- + shared platforms make you quicker
- + delivery matters, so does design
- + be bold~~est~~

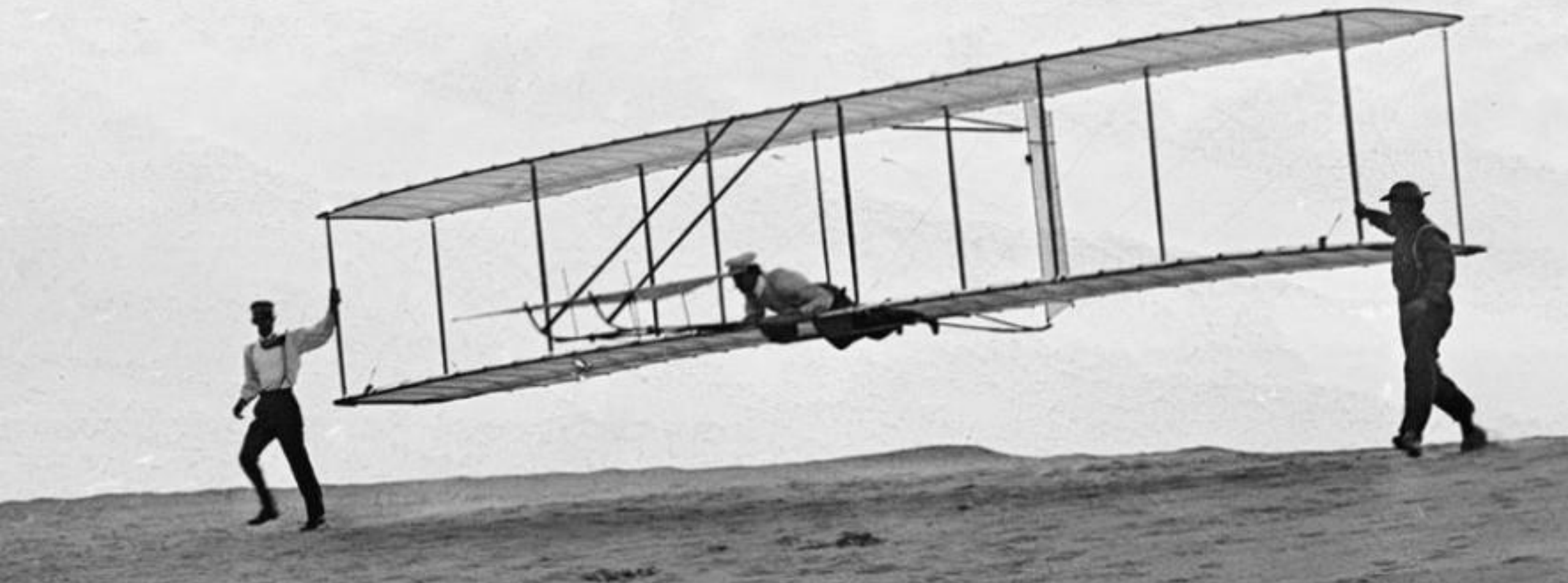
lessons learned

- + Plan and develop **full service cycle** (not only the central data exchange component).
- + IT is not the service! Define **clear business-goal** before IT-development and stick to it.
- + Make use of agile approach – **stepwise approach** with rapid quantitative feedback for learning
- + **Data quality** measures should be there from the beginning - close the feedback loop early
- + Robust data and information **standard management governance** across health sector is a must to manage the complexity
- + **Usability!** Developing process has to include medical competence – the users
- + Collect “**low-hanging fruits**” fast – make users happy to motivate adoption of innovative solutions.

lessons learned

- + You need to have a strong customer
- + The performer / developer must be also strong
- + Strong project manager with a design focus
- + Strong architect
- + **However, everything is based on good people**

How to boost innovation?



Connected Health Cluster

The Connected Health Cluster, led by Tehnopol Science and Business Park, connects you with the Estonian health innovation ecosystem – we help you to find information or partners, so you can start taking advantage of the unique environment Estonia offers.

ABOUT

The Connected Health Cluster is a country-wide partnership between health-related stakeholders in Estonia, who are committed to accelerating the adoption of connected health solutions, on an international scale and on commercial terms. The cluster brings together start-ups, health IT companies, pharma companies, healthcare providers, user groups and public authorities to accelerate the development and implementation of novel health products and services. The cluster is part of the European Connected Health Alliance and the ScanBalt network.

WHAT WE OFFER

- Collaborative development in health technologies.
- International co-operation opportunities with Estonian digital health companies
- Business development services for health tech companies in Estonia and Europe
- Incubation for start-ups, export acceleration for scale-up companies, office and lab space, soft-landing for foreign companies
- Study visits and networking with Estonian digital health stakeholders

CONTACT

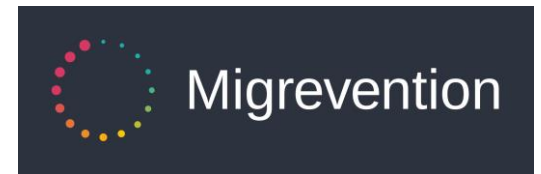
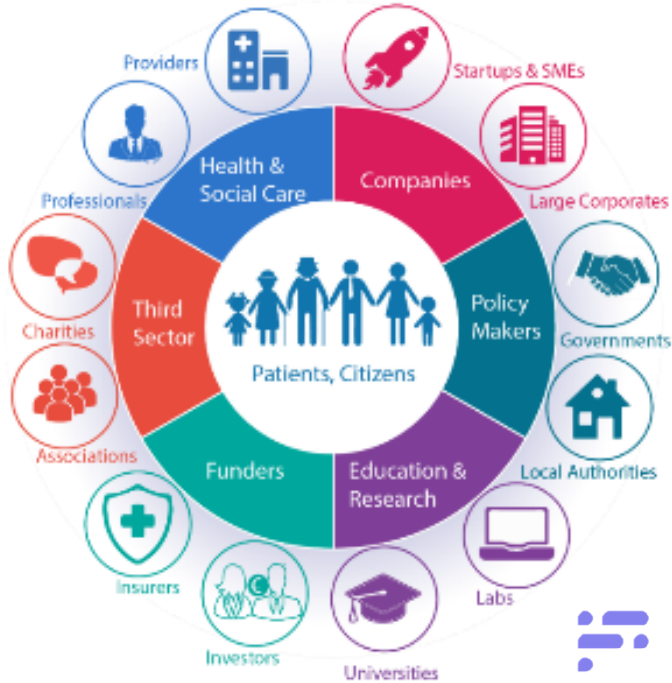
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MEMBERS



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