

2023 Thought Leader EHTEL Symposium
Key architectural concepts
for a digital integrated governance



Anders Tunold-Hanssen
Nordic Interoperability Project



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IHE-EUROPE

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With the support of



Interoperability: What is the success recipe?



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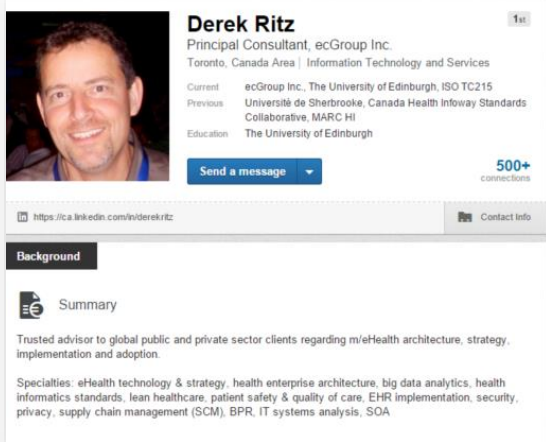


Compulsory apologies...

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Introduction... and an admission of *biases*.

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Background

Summary

Trusted advisor to global public and private sector clients regarding m/eHealth architecture, strategy, implementation and adoption.

Specialties: eHealth technology & strategy, health enterprise architecture, big data analytics, health informatics standards, lean healthcare, patient safety & quality of care, EHR implementation, security, privacy, supply chain management (SCM), BPR, IT systems analysis, SOA



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An inconvenient truth...

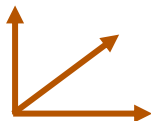


“Interoperability is a ***governance*** problem *pretending* to be a technical problem.”

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Unpacking a “pithy” statement into component parts...



Axes of Governance

- Technical
- Behavioural



Instruments of Governance

- Legislation / Policy
- Funding / Payments
- Conformance-testing

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What do we govern along the *technical* axis?



- The distinct kinds of digital health **standards** represent a portfolio of **governance** targets.
- **Content**: there must be a consensus definition of the data we will share. Who will develop this? How will it be managed?
- **Coding**: these data must be expressed using terms we all understand. Again... who chooses? Is compliance mandatory?
- **Communication**: the sender and receiver must use an agreed wire transport protocol. Are exceptions allowed... if yes, when?
- **Confidentiality / Security**: healthcare is a regulated industry... we must adhere to data exchange and data storage protocols that ensure the privacy of person-centric content is protected. How do we define (and manage) the “circle of trust”?

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What do we govern along the *behavioural* axis?



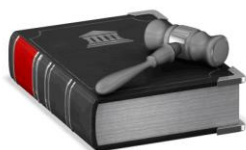
- Interoperability supports the care delivery network's operational system behaviours.
- Where best-practice or evidence-based **workflows** are defined, have these been adhered to (e.g. **CCGs**)?
- **When** should a transaction begin... and what are the normative pre-conditions or trigger conditions?
- **How** should the sender and the receiver conduct the transaction to ensure it is safely done (e.g. exception handling)?
- What **post-conditions** are mandatory on each side of the transaction (for example, must ACID properties be met)?

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How do we leverage our *instruments* of Governance?

The default **legal "posture"** has a huge impact on interoperability. In some jurisdictions it has been necessary to enact **anti-data-blocking** legislation.



Interoperability can be framed as a **rights** issue:

Each citizen has a right to **patient-safe, high-quality** care.

Safe, high-quality care relies on the citizen's health data being **shared** to those who are delivering care to them.

By **default** – the citizen's health data will be shared **for the purposes of care delivery** unless the citizen has **opted out** of such data sharing.

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How do we leverage our *instruments* of Governance?

There is no more powerful lever of change in the behaviour of our care delivery networks than “**how**” we pay and “**what**” we pay for.



Interoperability can be framed as a **funding** issue:

In the USA, the Advancing Care Information Reporting initiative specifically provides **incentive funding** for clinicians who adopt certified EHR technology and practice secure exchange of health information. The Merit-based Incentive Payment System (**MIPS**) awards points for activities such as **ePrescribing** or sending **care summaries**. Meeting points thresholds unlocks MIPS dollars.

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How do we leverage our *instruments* of Governance?

“Trust... but **verify**.”

-Ronald Reagan



Operationalization is a **conformance-testing** issue.

(30) To further support interoperability and security, Member States may maintain or define specific rules for the procurement, reimbursement, financing or use of EHR systems at national level in the context of the organisation, delivery or financing of health services. Such specific rules should not impede the free movement of EHR systems in the Union. Some Member States have introduced **mandatory certification** of EHR systems or **mandatory interoperability testing** for their connection to national digital health services. Such requirements are commonly reflected in procurements organised by healthcare providers, national or regional authorities. **Mandatory certification of EHR systems at Union level should establish a baseline that can be used in procurements at national level.**

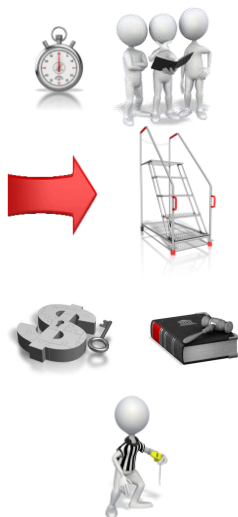
Proposed European Health Data Space Regulation, clause 30

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A52022PC0197>

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What can be learned from the *COVID Certificate* case study?



- Data **content**, **coding**, **representation**, and **communication** standards were developed by a Commission-supported expert team. This team *cooperated* with WHO but independently completed their specification... quickly.
- Technical specs related to QR code verification and the operation of the PKI-based trust network (re: **confidentiality**) were also agreed to. A working **open-source reference implementation** plus a test harness were developed as global public goods.
- A common **legal basis** was adopted for operations related to COVID certificates and the pan-European trust platform.
- Funding was provided for all MS to **adopt** the reference implementation and **connect** it to their national infrastructure.
- The Commission **conformance-tested** each national platform prior to its acceptance into the trust network.

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A “hopeful” note regarding *successful* interoperability...



Where there is an agreed desire for an **outcome** that relies on interoperability, the governance processes encounter less ***friction***.

*Interoperability should be a **means...**
not an end.*

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Thank you!!

