

Digital Health and Health Data in Belgium, a brief overview

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Paradigm shift in the care model

	Current care model (as is)	New care model (to be)
Target group	Sick (disease oriented)	Population (person-centred)
	Single syndrome	Multiple chronic pathology
Role of the patient	Passive receiver	Participative, active partner (self-management, shared decision making, patient empowerment)
Focus of care	Health care, curative	Public health prevention, HC-promotion, well-being, ...
	One size fits all	Personalised medicine - individual preferences
Care organisation	Supply driven	Demand driven (patient centered)
	Silo, fragmentation	Integration, continuum, coordination
Healthcare provider	Specialist / hospital central	Community care / proximal care
	Individual physician	Team (HCP: physician & others) including patient and informal care/family
Role of provider	Single episodes	Care continuum
HC Objective	Process	Outcome
	Healing	Maximum quality of life, comfort, independence
Information	Retrospective	Real time, predictive
	Separate (paper) files	Integrated EHR
Financing	Volume	Value
	Per performance	Bundled payment (lump sum)
Focus policy	Cost savings	Value Based Health Care

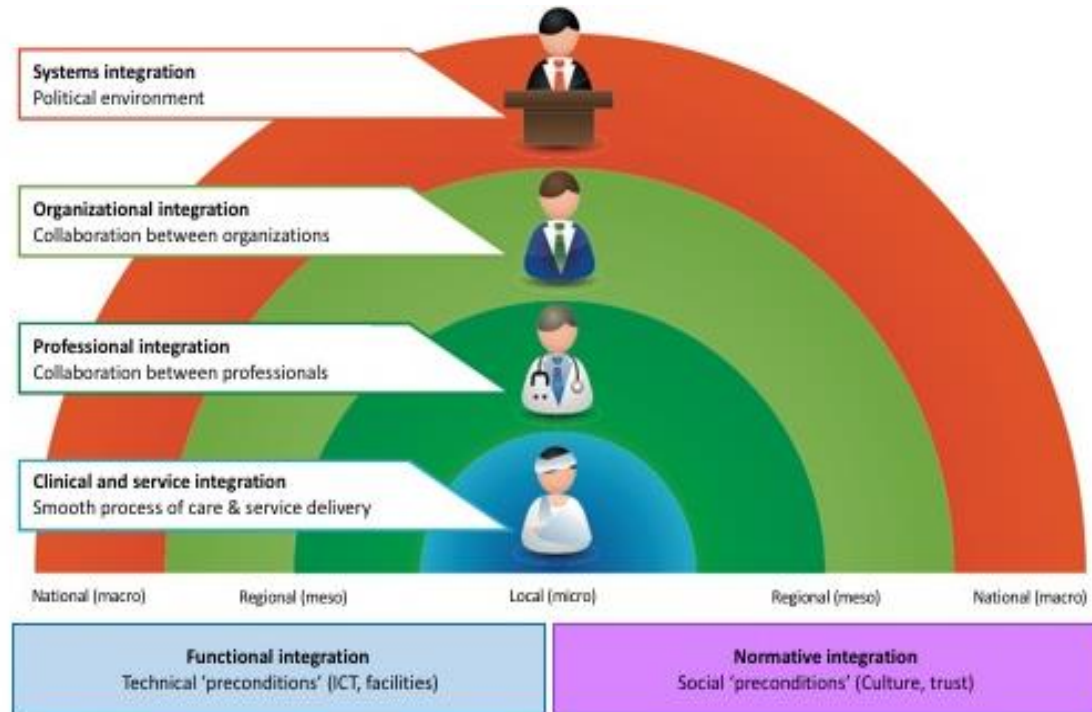


Integrated Care

Integrated Care = evolution towards a health and wellbeing system, based on person- and population-oriented care, with cooperation between care providers and care institutions across lines and sectors.

Includes integration of the person and their (social) context.

Includes functional and digital integration.



Based on: Valentijn et al. (2013 & 2016)



What is BIHR

An environment where a person/resident has a clear view of his/her/their own health (care) data and wellbeing data and where everyone who provides care for that person also has a view of all data that are necessary to provide high-quality care.

- Every person involved can **actively contribute** to keeping the information up-to-date and correct;
- Should provide a better system for **entering, structuring, connecting and organizing** all available information, with more **added value for healthcare**;
- Intensive **data reuse** for science, research and development, policy making, and population is paramount.



Core objectives

1	Health	Supporting quality, continuity and safety of care & wellbeing through an integrated health record .
2	Person	Citizen/patient involvement and empowerment with stronger access to their health data and attention to health literacy .
3	Care process	Healthcare provider empowerment by improving the input, quality, availability and access to health data with the aim to increase quality of care .
4	Reuse	Facilitating the exchange of data on care and health and the primary and secondary use of data.
5	Societal	Stimulation of innovation , research and development, policy preparation and population management.
6	Administrative	Digitizing and optimizing administrative processing .



eHealth Action plan

Action plan 2022-2024: how do projects contribute to the BIHR concept



Action plan 2025-2027: Which projects do we need to realise the BIHR concept.



Action Plan examples

Quality, continuity and safety of care

- Electronic patient/health record (EPD/DPI/EHR) based on BIHR concept for every healthcare provider: Q-Law, homologation, incentives;
- EHR in each healthcare institution: BMUC, Homologation, funding of specific domains;
- Electronic prescription and referrals;
- Decision support: prescribing antibiotics (AMR), lab tests and medical imaging;
- VIDIS (shared medication scheme);
- Digital health / home care: Teleconsultation, mHealth, Health Technology Assessment;
- Flanders (DZOP/Alivia, BelRAI, Vitalink, Data Space), Wallonia (Platform patient/citizen + HCP, Wall in health Data Space, PPS), Brussels, DG.

Facilitating the exchange of health and care data / Innovation, development and policy making

- Care Sets: Definition & Good Governance;
- Standards: Snomed CT, ICD-11, FIHR, guidance on implementation;
- Incentives for maintaining, sharing and consulting quality data;
- Metadata definition and use;
- MyHealth@EU: cross border patient summary, prescription;
- HealthData@EU: secondary use of data;
- Digital health technologies in integrated care;
- AI

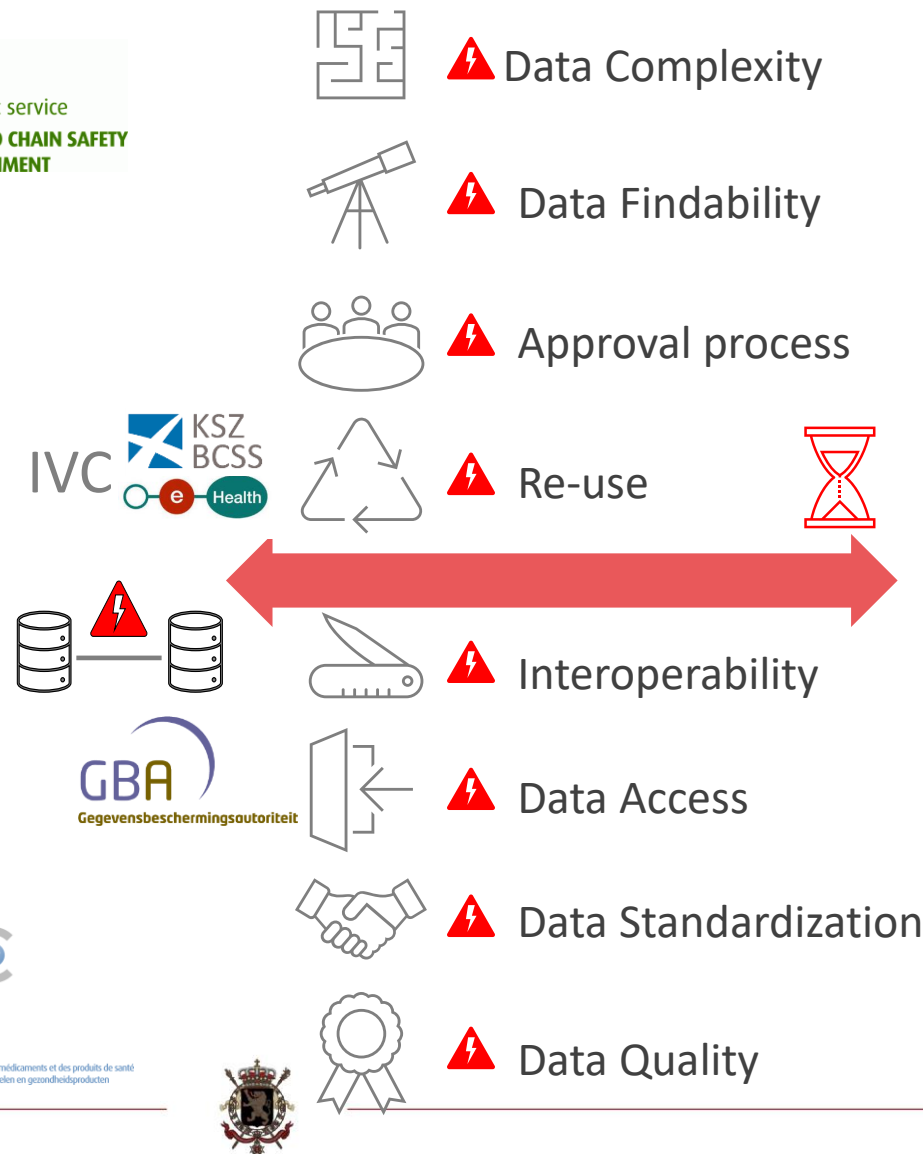
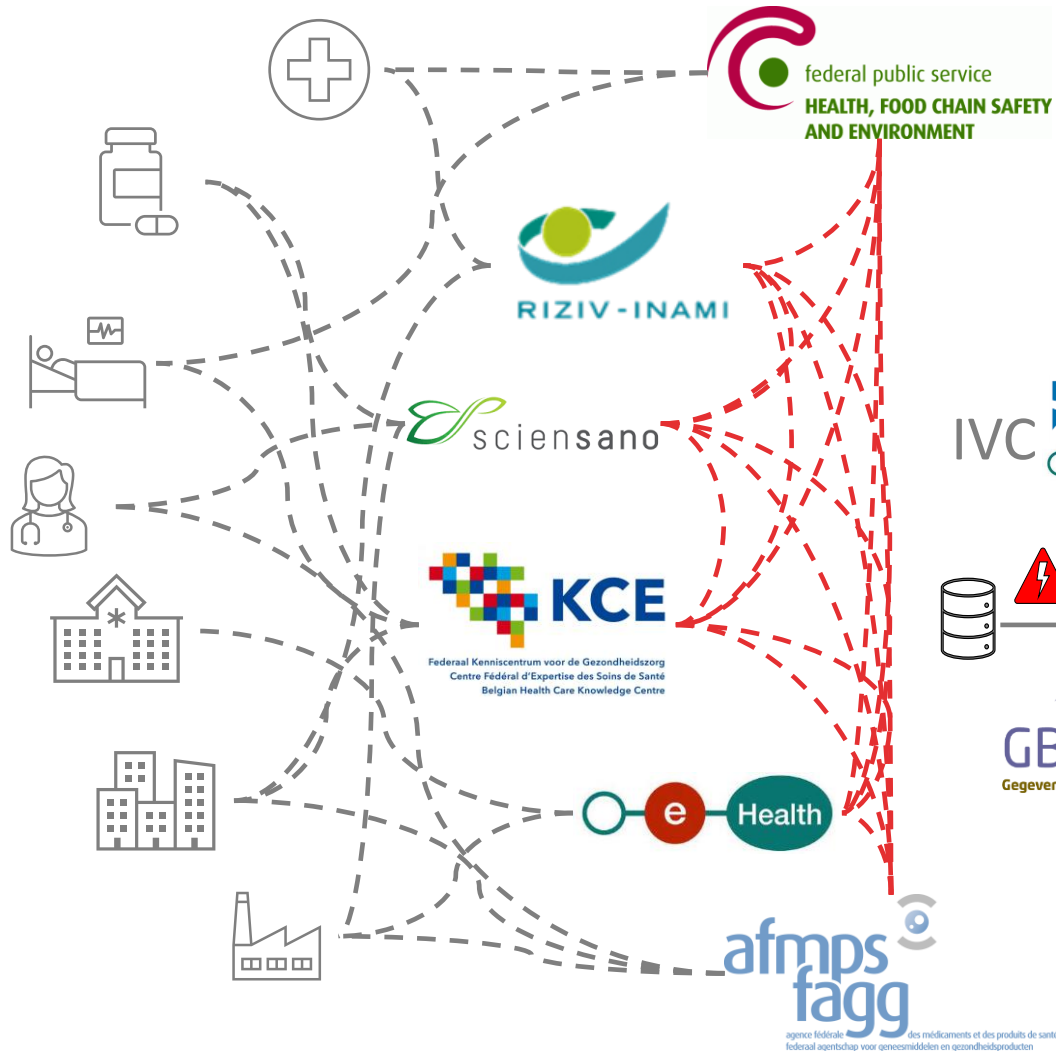


From concept to reality

- Role of Care professionals (other than healthcare professionals): part of the Multidisciplinary Care Team, including the person concerned;
- Data controller for all data sources: agreements on access to the data;
- Healthcare actor access to medical data: options, limitations?
- Interfederal portal, both for individuals and for care actors;
- Updating, sharing and consulting high-quality information: role of Care Sets, Care Episodes, Incentives;
- Hubs, Vaults and eHealth Platform: essential role, importance in cross border Health Care;
- EHDS and organization of the Health Data Access Bodies;
- Governance: roadmap, coordination, decisions, participation, stakeholders;
- Contractual cooperation model: reuse of services, legal framework.



Federal Health Data Landscape



Customer

-  Research
-  Industry
-  Government
-  Care
-  Citizens



Health Data Agency

Vision: A data-driven health system, where **data on health, healthcare and well-being** in all its facets is easily, uniformly, transparently and securely **available**, leading to a higher quality, affordable, preventive and **goal-oriented care for every citizen**.

Mission: In collaboration with data holders and data users, help make health, healthcare and wellbeing data uniform, transparent and more easily available in a secure environment. With this, the HDA wants to stimulate health (care) management, scientific research, innovation and policy preparation to ultimately improve the health of citizens in Belgium and Europe.

Status:

- Program since begin of 2022 with NIHDI, PHFCSE, FAMHP, KCE, Sciensano
- Law of 14 March 2023
- Currently kicking off the Agency (people, Board of Governors, Users Committee, ...)

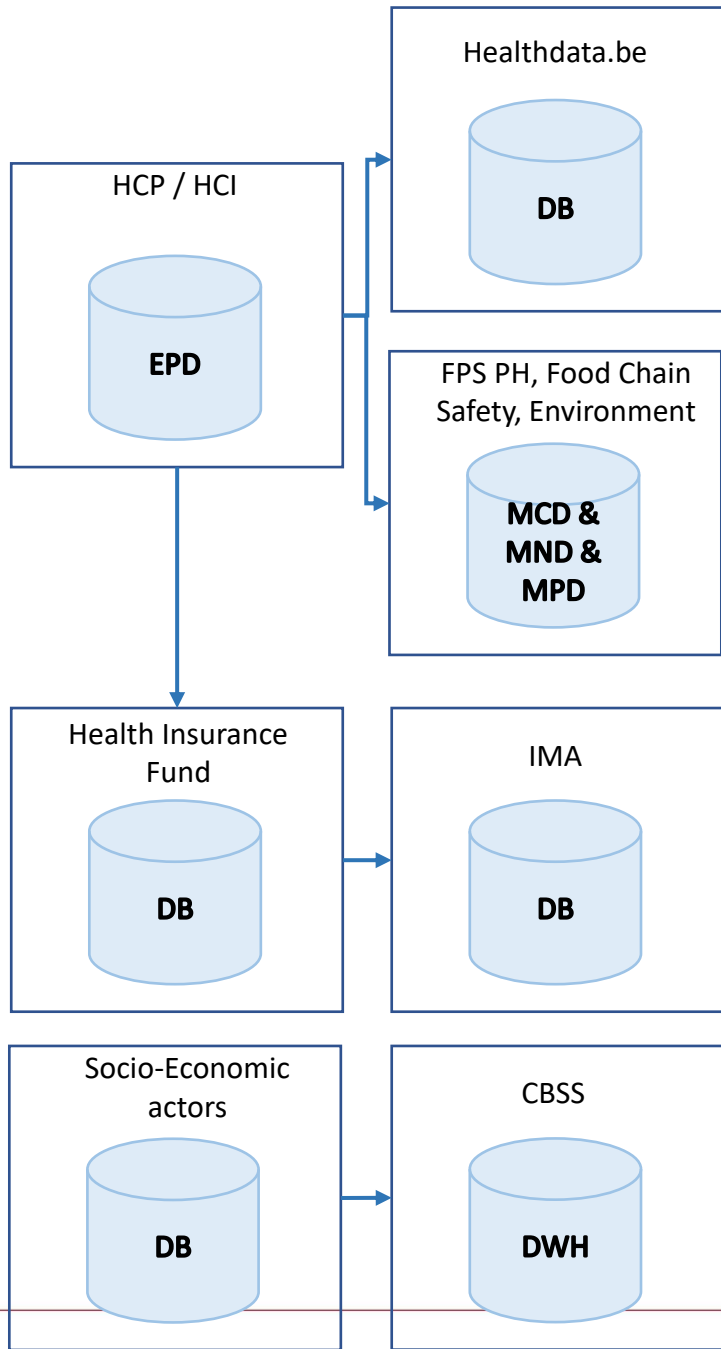


Health Data Agency

- Trusted, accurate, reliable, high quality and interoperable data (FAIR), Data Catalogue, Master Data Management;
- Ethical and Deontological use of data, harmonization of approach;
- Transparency on data usage, communication with citizen and trust building;
- Correct legal basis, efficient process for data permits;
- Privacy and GDPR: pseudonymised / anonymised secondary use;
- Harmonised governance, data capabilities & infrastructure;
- Create a level playing field (SME, ...);
- Support evidence-based practice/medicine and population management;
- Nurish Innovation, RWD/E, R&D, AI.



Datasources



SUPPORT / FACILITATE Secondary Use

Role of the Health Data Authority (HDA)

- Detect secondary use needs
- Determine access strategy
- Master data management
- Document data sources
- Document disclosure processes
- Organization data validation
- Organization of separation of functions
- Training of users and analysts
- Organization small cell risk analysis
- Organization FAIR portal data catalogue
- Advocacy and communication
- Coordination of access infrastructure
- Legal support
- Assure security & Privacy
- deal with bottlenecks

Role of the eHealth platform

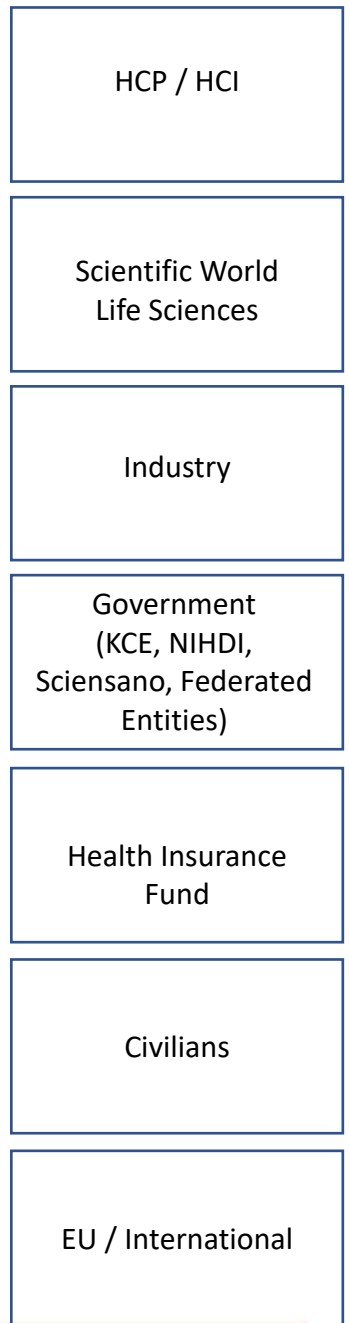
- Availability of basic services
- Trusted Third Party
- ...

Role of the Information Safety Comité

- generic deliberations to validate standard working practices
- specific deliberations on data exchanges



Secondary use



EU Recovery and Resilience Fund EU-RRF (2021-2024)

- 29 M€ via NIHDI to a.o. SW developers
 - Action 1: Support multidisciplinary care by making care sets available
 - Action 2: Extend electronic prescription capabilities
 - Action 3: Increase quality of prescriptions and reduce costs through Clinical Decision Support systems
 - Action 4: Create an integrated view on distributed medication information and activate the care use
 - Action 5: Operationalise Teleconsulting
 - Action 6: Establish a Health Data Eco-System aligned with EC Open Data Market targets
- 11 M€ via SPF SPSCAE to a.o. SW developers
 - Action 7: Activate and empower citizens in the management of their own health and wellbeing
 - Action 8: Stimulate innovation in Digital Healthcare
 - Action 9: Enable Integrated Care capabilities through first and second line collaboration
 - Action 10: Develop person oriented and user friendly interfaces to health and wellbeing services

BE Recovery and Transition Plan

BE-RTP (2021-2024)

- 22 M€ + 4 M€ for SPSCAE / NIHDI
 - Quality of care / IHR for every HCP
 - Common Portal HCP
 - Euthanasia Register
 - Invoice Medex
 - SNOMED CT Translation
 - Increased Compensation
- 60 M€ for Hospitals in Budget Financial Means (BFM)
 - Cybersecurity Hospitals
 - Data Capabilities Hospitals
 - Innovation Hospitals