





The healthdata.be project:

Minimalisation of registration burden, Maximalisation of Return On Information

Dentist First Aid Surgeon Emergence

Dentist First Aid Surgeon Emergency

PriMHE - Vienna - 25.11.2015













healthdata.be: the end-to-end process

Architecture

Industry: integration HD4DP in their messaging software





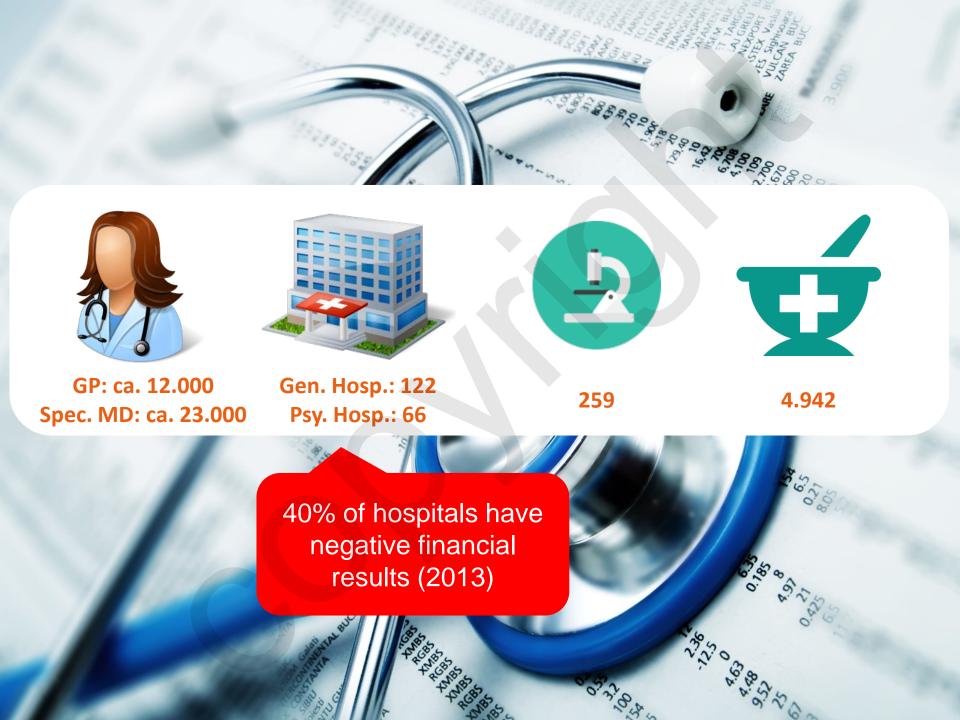


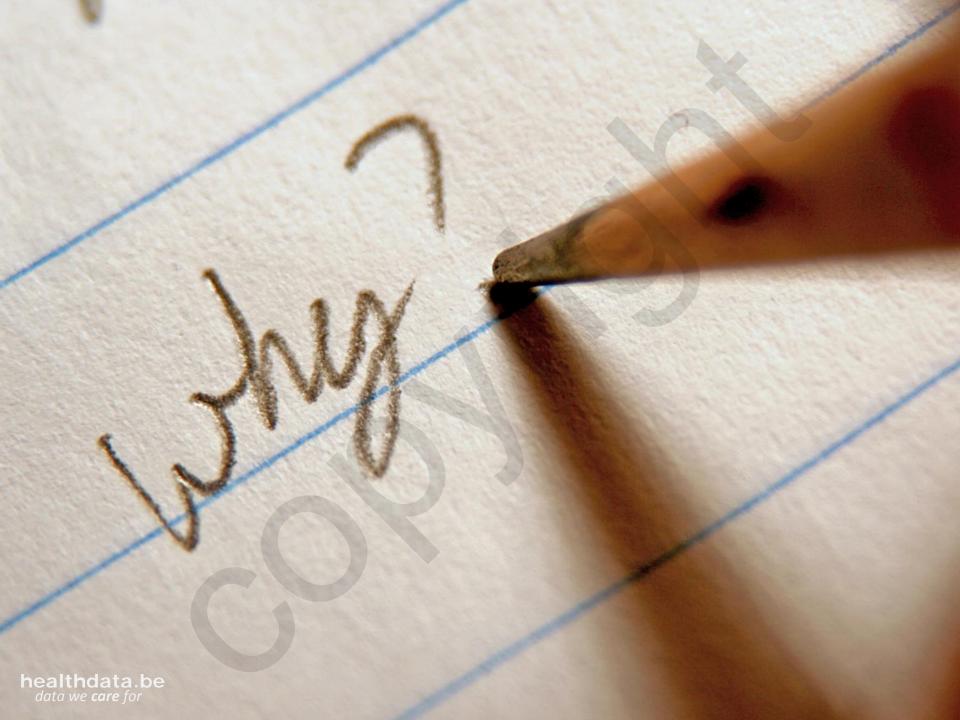






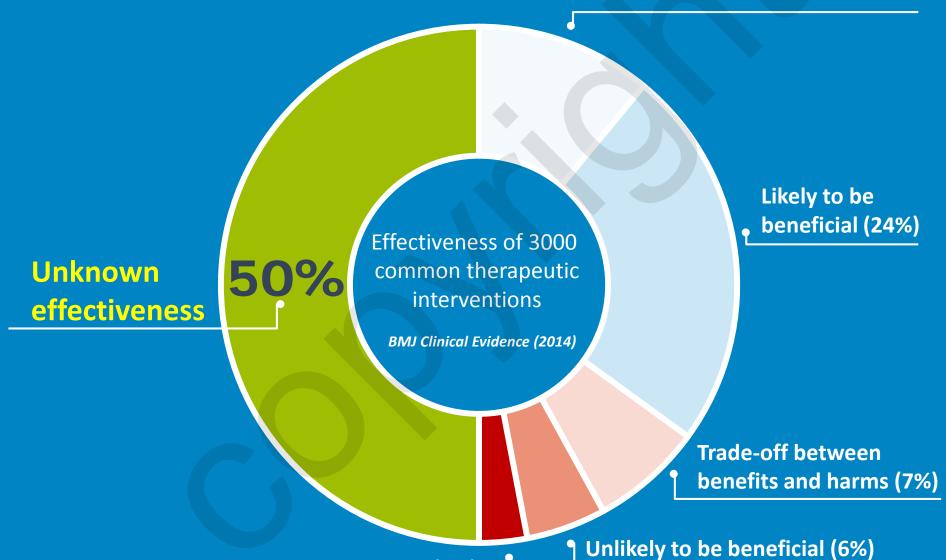






Clinical registries are necessary!

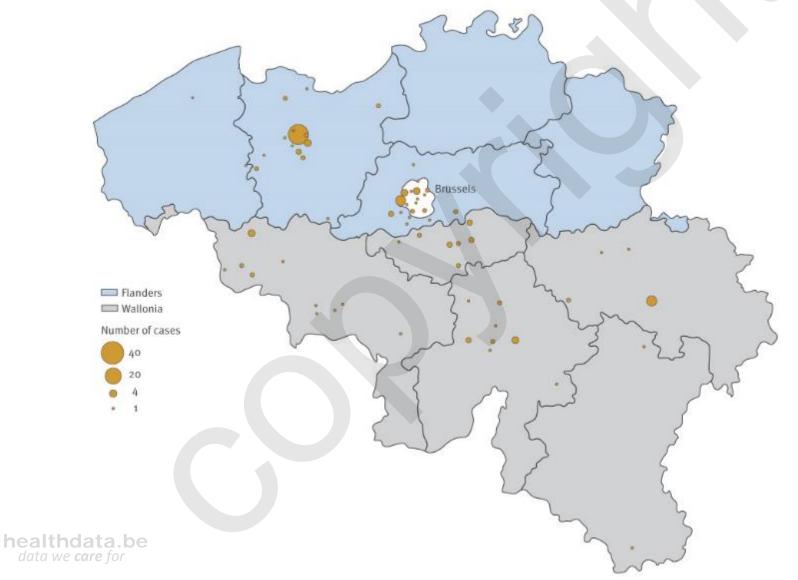
Beneficial (11%)



Likely to be ineffective or harmful (3%)

Epidemiological surveillances are necessary!

Sabbe et al., (2012) Measles resurgence in Belgium, Eurosurveillance



Registries as a pillar of « Value Based Health Care »

ZorgInstituut.NL, based on Michael Porter

Benchmarking costs + Decrease of cost of

of interventions

Outcome of care Value of care is central goal Value of care in Value Based Health Care Cost of care Contribution to Value of care **₹** better outcomes of care **Quality of care registries** trough quality must increase value of care Contribution to of care registries lower cost of care Continuous improvement and acceleration of the improvement cycle of health care professionals by benchmarking Quality of care registries can contribute in different ways

Less complications +

reduces costs



registration

INVENTORY OF REGISTERS

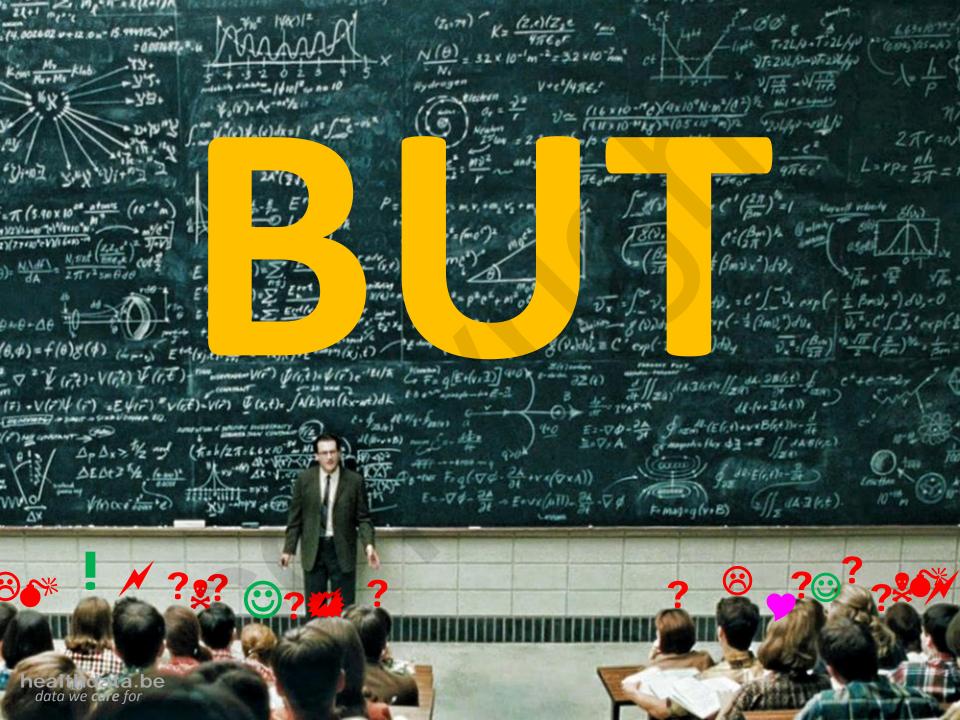
Within the Belgian healthcare landscape, there are many active players, each of whom ask specific health(care) professionals for specific information, which can se epidemiological research (eg. Flu epidemic), quality of care, reimbursement, etc. This inventory provides an overview of these primary and secondary databases information they collect and publish. More information about the structure and objectives of this inventory can be found on the website of healthdata.be.

+ Filters

Select All

Deselect All

	Register Name \$	Abbreviation ≎	Responsible Organisation Filter ▼	Main Func
	Belgian Neuromuscular Disease Registry	BNMDR	Wetenschappelijk Instituut Volksgezondheid (WIV)	Epidemiological sur
	Belgian Cystic Fibrosis registry	BCFR	Wetenschappelijk Instituut Volksgezondheid (WIV)	Epidemiological sur
	National Surveillance of Septicemia in the Hospital	SEP	Wetenschappelijk Instituut Volksgezondheid (WIV)	Epidemiological sur
	Sexually transmitted infection (sentinel surveillance) by STi clinicians	STI surv	Wetenschappelijk Instituut Volksgezondheid (WIV)	Epidemiological sur
	National Surveillance of Meticillin resistant Staphylococcus aureus in Belgian hospitals	MRSA	Wetenschappelijk Instituut Volksgezondheid (WIV)	Epidemiological sur
	Central Register of Rare Diseases	CRRD	Wetenschappelijk Instituut Volksgezondheid (WIV)	Epidemiological sur
	Belgian Treatment Demand Indicator Register	BTDIR	Wetenschappelijk Instituut Volksgezondheid (WIV)	Epidemiological sur
9	Surveillance of Infectious diseases in Children by paediatricians and GP	Pedisurv	Wetenschappelijk Instituut Volksgezondheid (WIV)	Epidemiological sur



Collection of health (care) related data in Belgium (n > 160 projects): "AS-IS"





















Impact

- Repeated registration of same information: high costs
 - for data providers (and for researchers and government!)
- Heterogeneous method & content: low transparency
 - and high administrative burden & complexity
- Limited privacy & security
- Insufficient return on information



Zoekertjes





Nederlands -



Q



Home

Binnenland

Buitenland

Registratielast stroomlijnen verminder

Registratielast stroomlijnen vermindert administratie



10/09/2015 - 09h59

Over de meeste thema's in de enquête over zieker huisfinanciering b eensgezind te zijn. Als er al meningsverschiller van ziekenhuisnetwerken in Franstalig België



stelling dat de regels vereenvoud integreren -bijvoorbeeld voor gel specialisten-spreekt zich hier niet en leden van de raden van bestuu (66,7%) er achter staan.

Unanimiteit bestaat er onder de leiding regionaal gevraagde registraties onnoc verminderen. De artsen gaan hiermee ak

Communautaire verschillen

Uit deze enquête komen weinig communautaire het voorstel van De Block om pathologiegroepen is hiervoor gewonnen, bij de Franstaligen is dat niet eens de helft (49,9%). Vooral huisartsen (72,1%) en mensen met een ziekenhuisfunctie (72,7%) zijn pro concentratie, ziekenhuisartsen zijn hierin minde

Growing Awareness

- Van de Sande, et al. (2006) Inventory of databases health care, KCE Reports 30A;
- Belgian Court of Audit (2010) Scientific support of federal health policy, BCA Reports;
- Coussée (2010) Charter High-quality recording of data from the healthcare sector, Brussels; Zorgnet Vlaanderen;
- Action plan eHealth 2013-2018: Action point 18 "Inventory and consolidation registers"; In deze editie
- Law 5 May 2014: principle of "only once" data collection in activities gov. services & institutes;
- Federal (9.10.2014) coalition agreement prioritizes reduction of administrative burden of health care professionals: "Only once"!
- Federal Minister Maggie De Block (25.04.2015): Reform plan financing of hospitals => €40.000.000 annual budget for IT;
- Version 2.0 of Action plan eHealth 2013-2018



LEXICON



ACTIEPUNTEN

http://www.plan-esante.be



HOME



INITIATIEF VAN



NIEUWS

CONTACT











Gegevens delen via het systeem hubs & metahub voor algemene en universitaire ziekenhuizen

Delen om samen te werken

Psychiatrische en andere instellingen en het systeem hubs & metahub

Invoeren van een uniform evaluatieinstrument (BeIRAI)







Toegang tot de gegevens door de patient Communicatie





Opleiding en ICT-ondersteuning van zorgverstrekkers









Administratieve vereenvoudiging Traceerbaarheid van de implantaten en van de geneesmiddellen



Veralgemeend gebruik van de eHealthBox en gegevens van zorgverstrekkers beschikbaar in CoBRHA



egisters







healthdata.be within the empirical cycle











Research Question













Theory Development 3



Experiment













Belasting

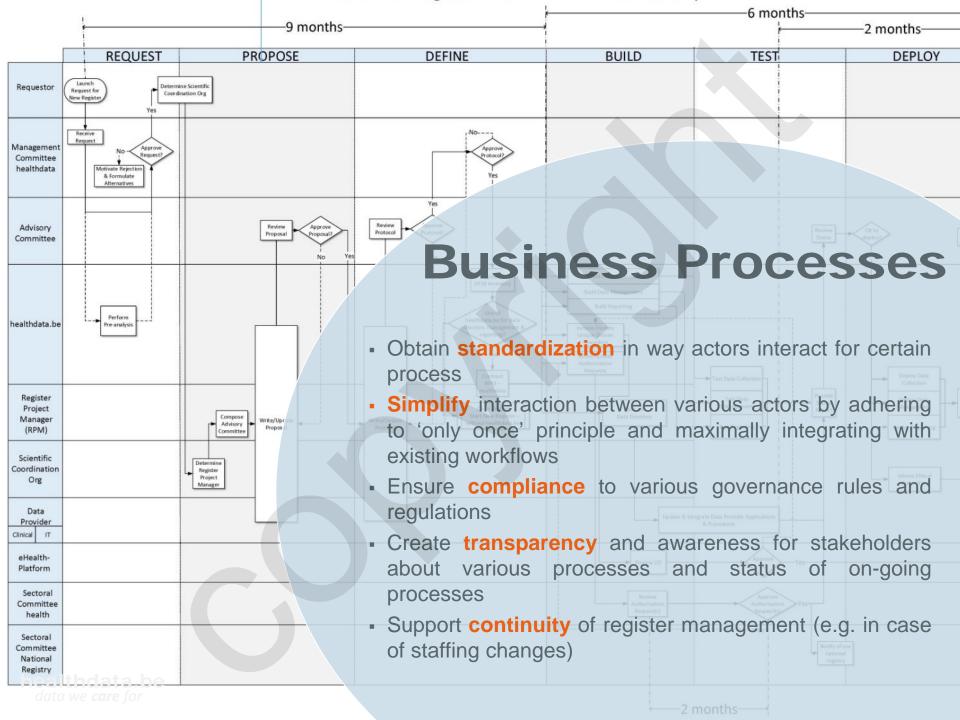
Leuker kunnei

TaxOffice.nl/
We can't make it

Simplification

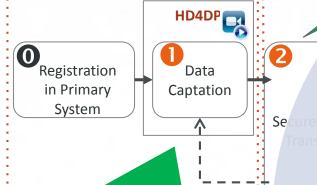
Healthdata.be will focus on the *simplification*, *standardization* and *automatization* of the:

- Business processes
- Data collection architecture
- Information architecture (terminology)
- Data management
- Feedback reporting



healthdata.be: the end-to-end process

Use of National Registry Number as ID



All manual input remains (structured and coded, accelinter]national standard, CBBs) in local database of D

- Import in future upg EPD/LIMS;
- Re-Use for internal BI & C

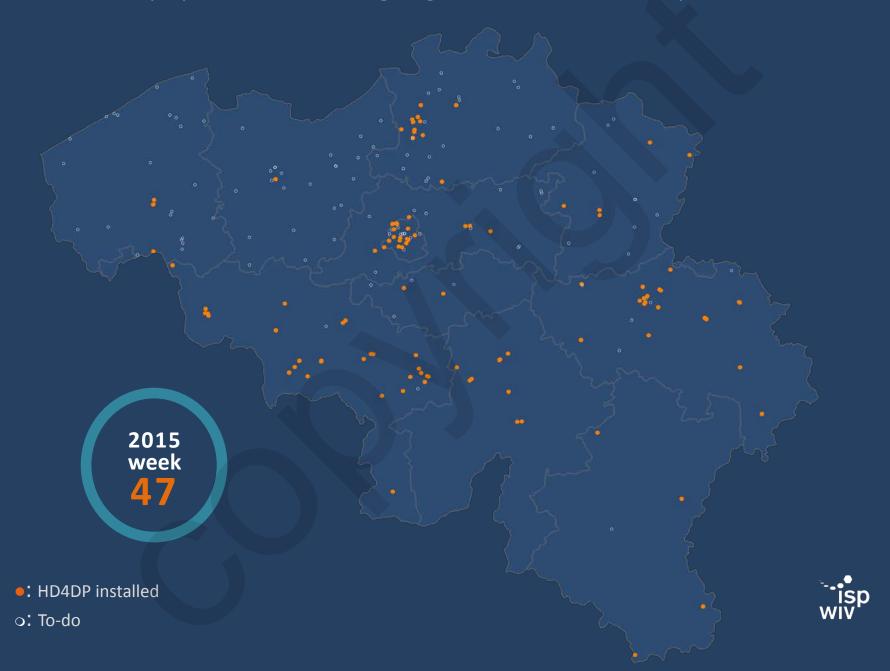
Trusted Third Par for encryption ar pseudonymisatio

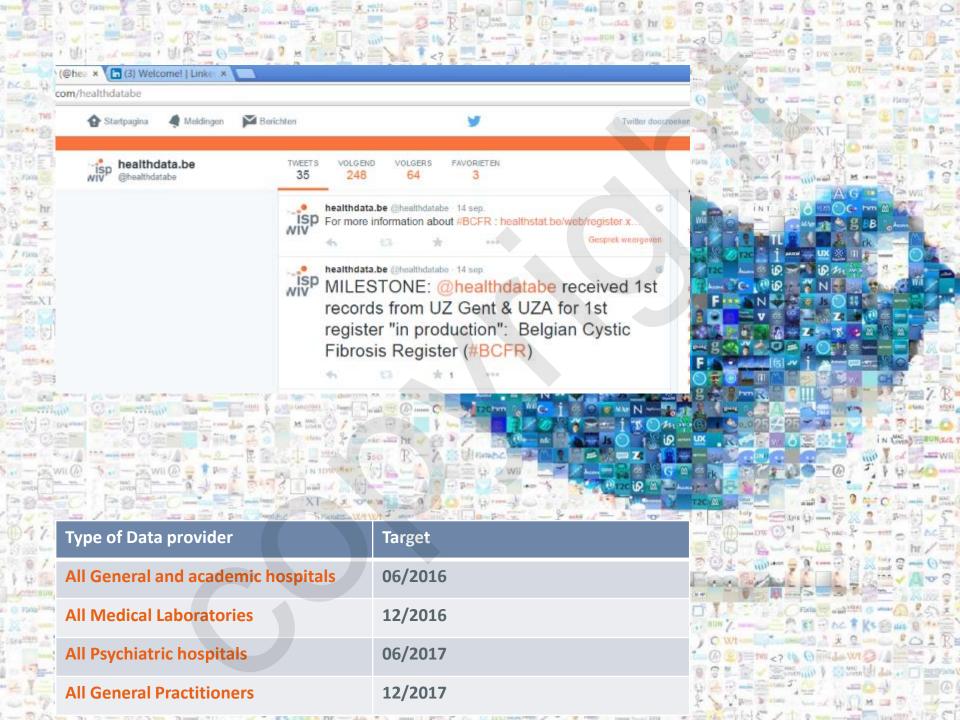
Architecture

- HD4DP ("healthdata for data providers"): Free and open (Apache License 2.0) local client software (API* based with eForms) managed by HD Catalogue;
- "Open" architecture approved by:
 - WG Architecture: Positive advise (12/12/2014 & 06/03/2015) generic healthdata architecture;
 - Sectorial Committee health (Privacy commission): Authorization (21/04/2015) generic healthdata architecture;
 - eHealth-platform : Authorization (22/04/2015) generic healthdata architecture;
- Successful test installations: UZLeuven, UZAntwerpen, UZBrussels; GZA, ZNA, UZGent, CHU Erasme, CHU Charleroi, Inkendaal; In production since 14.09.2015.
- Industry: integration HD4DP in their (messaging) software

healthdata.be data we care for

Deployment **HD4DP** in Belgian general and academic hospitals



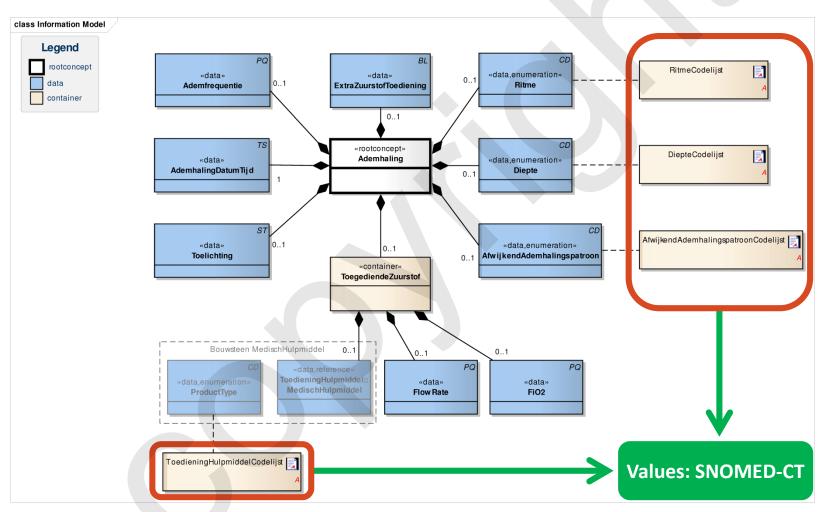






Example Clinical Building block: "breathing"







Redesign of data collections by healthdata.be					
2014 – 2015 (Q2)	2015-2016 (Q2)	2016-2017 (Q2)			
Bel. Cystic Fibrosis Reg.	Bel. HIV-AIDS Surveillance	Ambulatory Care Health Information Lab			
Bel. Early Warning System for Drugs	Bel. HIV-AIDS Viral Loads	Bel. Treatment Demand Indicator Reg.			
Bel. Haemophilia Reg.	Bel. HIV-AIDS Cohort Study	Declaration Infect. Dis. Brussels-Capital region			
Bel. Neuromuscular Disease Reg.	Euro. Antimicrob. Resist. Surv. Netw.	Declaration Infect. Dis. Walloon Region			
Central Register Rare Dis.	Euro. Point Prevalence Surv. >> Wave 4	Hand hygiene			
IQED - Initiative Quality promotion and Epidemiology in Diabetes care	Surv. Infect. Dis. in Children	Healthcare Associated Infect. & Antimicrobial Use in Euro. Long Term Care Facilities			
IQED children and adolescents	Nat. Surv. Healthcare Associated Infect. in Intensive Care Units	Qermid©Coronaire stents			
IQED Foot clinics	Nat. Surv. Influenza	Qermid@Endoprothesen			
Nat. Surv. Antimicrobial Use in Bel. Hosp.	Nat. Surv. Meticillin resistant Staphylococcus aureus in Bel. Hosp.	Qermid©Hartdefibrillatoren			
Sent. Hosp. for Severe Acute Resp. Illness	Nat. Surv. multi-resistant micro-organisms in Bel. Hosp.	Qermid©Orthopride			
Euro. Surv. Antimicrob. Consumption	Nat. Surv. Septicemia in Hosp.	Qermid@Pacemakers			
Legend	Nat. Surv. Surgical Site Infect.	Quality Indicators Healthcare Associated Infect.			
	Sent. General Practitioners	Shared Arthritis File for Electronic use			
Registration started	Sent. laboratories Infect. Dis.	Surv. Creutzfeldt-Jakob dis. (Bel. Neurologists)			
Ready for launch	Sexually transmitted infect. (Sent. Surv.)				
In test	Surv. Clostridium difficile infect.				
Re-use of existing data	Surv. Infect. Dis. by Nat. ref. centre humane				

NEW >> Cancer Registry (anatomic nathology)

microbiology

Being merged



PACTE D'AVE

POUR LE PATIF

HD4Industry

"Future pact for the patient with the pharmaceutical industry" (2015)

Royal Decree 12 may 2014 "Unmet Medical Need"

=> HD Services:

- Re-use of data available at datawarehouse: Private enterprises can request access to data already available at DWH, if approval by Registry holder, steering committee HD and sectorial committee health.
- Start new data collection project: Private enterprises can submit to governmental body/institute a motivated proposal (cfr. Unmet Medical Need) for implementation of new data collection. If accepted, governmental body/institute acts as commissioner towards healthdata.be. The enterprise becomes Registry holder and finances the project.



9,738.5

3,310.47

8,867.80

2,310.87/

7,093.09

879.93

3,989.08

9,279.03

3,909.88

3,772.21

8,100.80

2,319.83

8,771.93

640 70

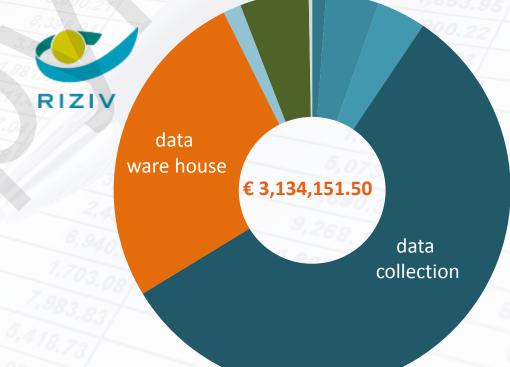
1,571.47

5,810.18

8,322.81

1,581.33

181.66





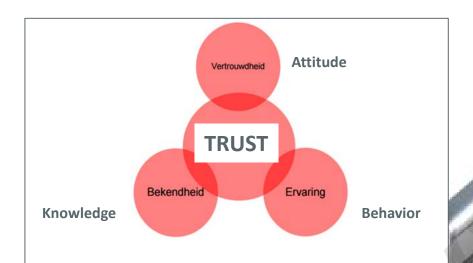


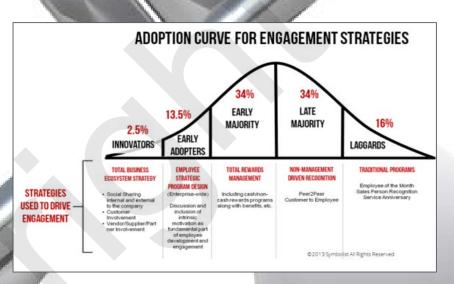
Healthdata SteerCo: Composition

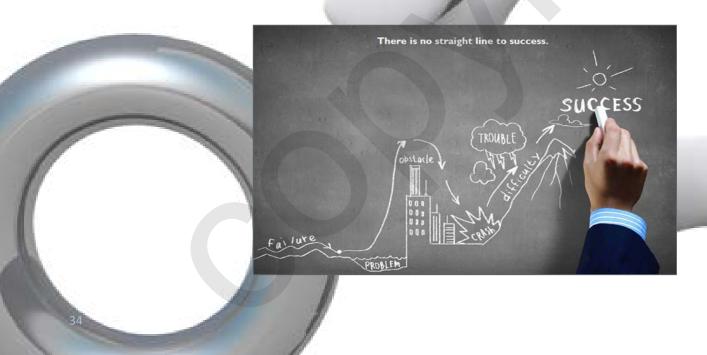
- Chair, not entitled to vote:
 - Chief civil servant (R De Ridder)
- Members entitled to vote:
 - 4 independent physicians (J Kips, P De Plaen, G De Moor, H Vanpottelbergh, P Kelchtermans, P Vollemaere, H De Nutte, G Van Pottelbergh)
 - 2 physician –scientists (P Cosyns , F Meunier, B Himpens, Y Englert)
 - 2 physicians from health insurance institutions (P Berkein , M Callens)
 - 3 experts medical informatics (E Bellon, A Vandenberghe, T Fiers)
 - 2 repr. of patients (L De Bot, M Fierens, B Pirsoul, R Heijlen)
- Members not entitled to vote:
 - 1 repr. of NIDHI (N Marly, P Meeus)
 - 1 repr. of FPS Health (C Decoster, I Mertens)
 - 1 repr. of KCE (S Devriese)
 - 1 repr. of eHealth-platform (F Robben, T Duvillier)
 - 1 repr. of each regional and community government (E Hendrickx, H De Kind)
 - Project leader healthdata (J van Bussel, J Kips)

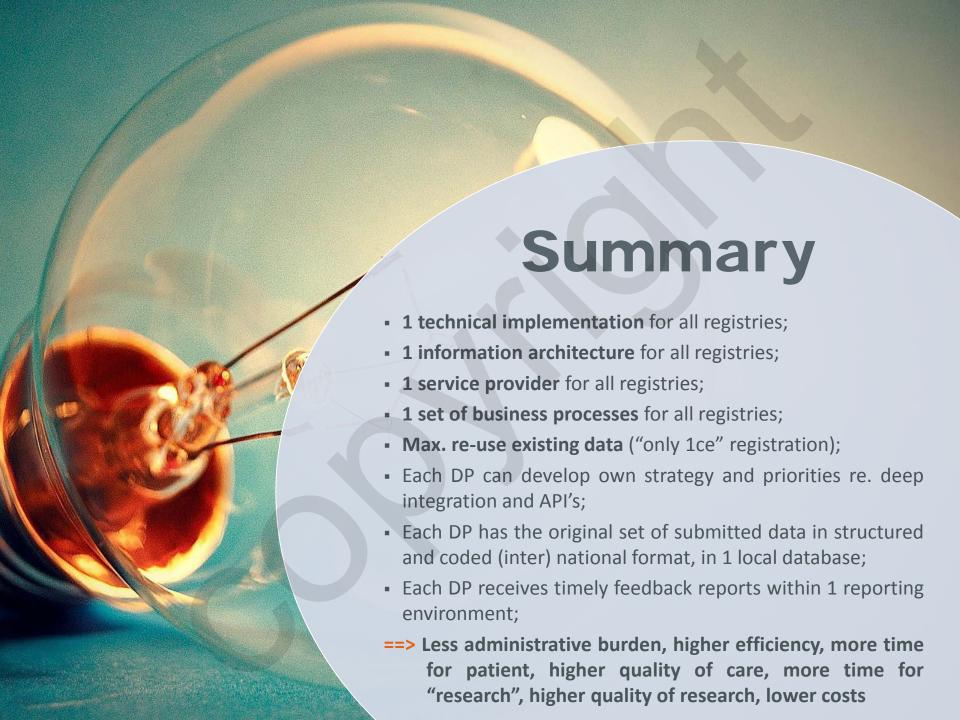
"Gimme My Dan Ownership

- **Data providers remain owner of their data**, unless otherwise agreed upon in convention between Parties;
 - Requestor of Registry, or designated third party is owner of the ensemble of data in Registry, unless otherwise agreed upon in convention between Parties;
- Re-use of data ONLY if positive advise owner AND Sectorial Committee Health



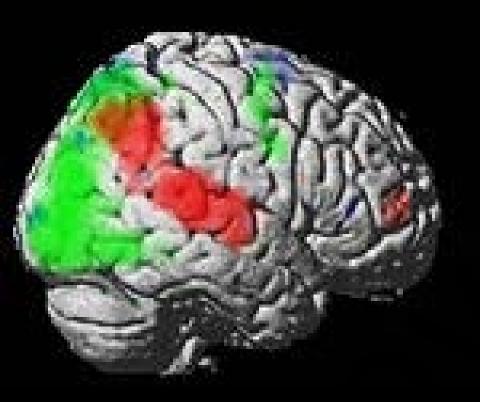


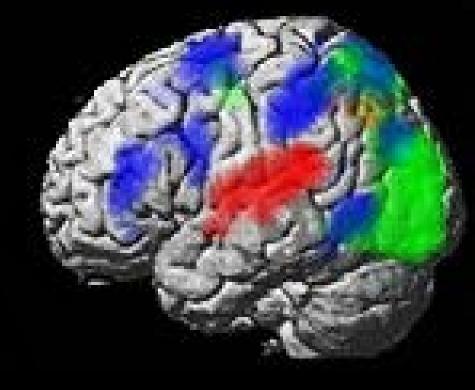












visual attention
auditory attention
somatosensory attention

Thank you for your attention!

Johan van Bussel, on behalf of the healthdata team

Anderson, J. et al. "Topographic Maps of Multisensory Attention." PNAS 107.46 (2010): 20110–20114. PMC. Web. 31 Dec. 2014.