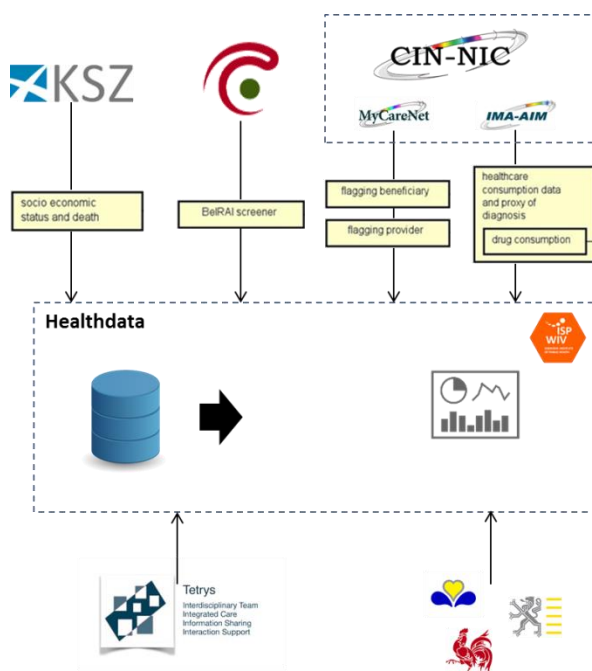# Healthdata's Role in Integreo

In this document, we aim to explain several key elements of Healthdata's participation in the Integreo project. The most important thing to stress here is that Healthdata is a technical facilitator who will focus on:

a) Centralizing and managing several existing data sources ('Global Data Consolidation')
b) Facilitating projects to collect new data and link it to existing sources ('Project Specific Data Consolidation')

Global Data Consolidation

On the one hand, Healthdata would facilitate Faith.be in gathering the variables specified from several data sources in a step-by-step manner. The specification of these parameters and the sources being used is something Faith decides upon by exploring the IMA database prior to this phase. The possibility of including the several data sources will also depend on availability and will expand (data sources of the regions)

This data will be used in a global dashboard, used by faith to do an external evaluation. (Parts of) this data can also be part of the self-evaluation of the projects. Whether or not they want to include some of these sources is discussed with the project teams.
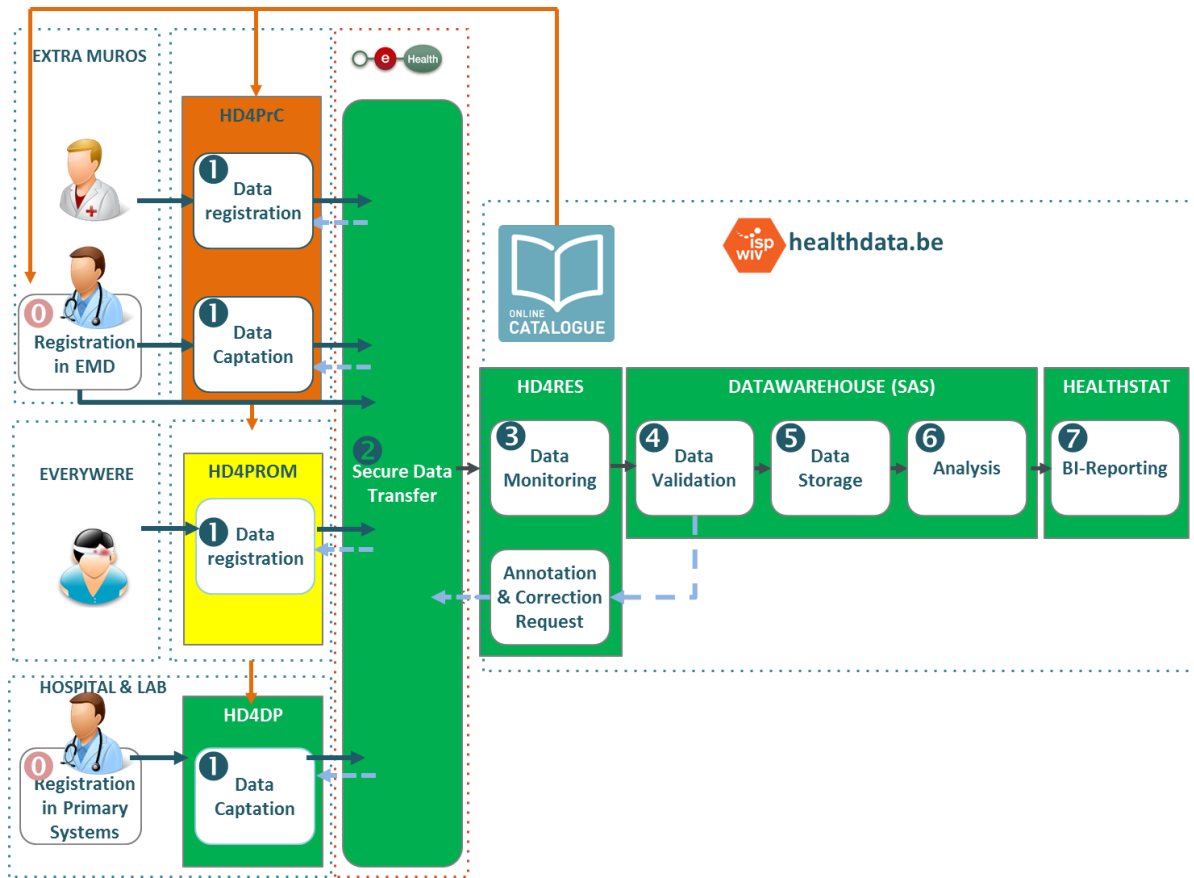
On the other hand, Healthdata will also allow data consolidation specific to the project needs. This approach is explained in the following section. To better understand those paragraphs, it is important to first have a look at the basic architecture of Healthdata's data collection possibilities.
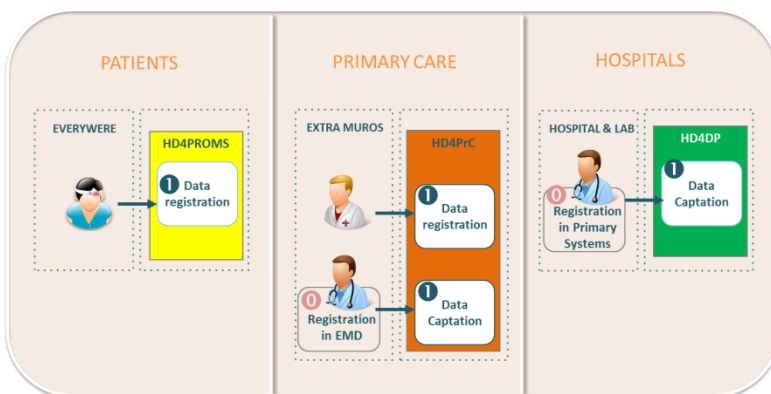
Example of Work Breakdown Structure

Task Name	Assigned To
FASE 1: Globale Data Consolidatie	
Opvragen Actieplannen projecten	Faith.be
Exploratie Faith.be op IMA DB	Faith.be
Validatie Indicatoren + Voorstel Projectspecifieke Indicatoren	Faith.be
Data Collectie Definitie	
IMA	
Data Selectie	Faith.be
Goedkeuring IMA Steerco	IMA
Technische Dataflow	Healthdata
Provide Dummy Dataset	IMA
BELRAI	
Data Selectie	Faith.be
Goedkeuring BELRAI Steerco	BELRAI
Technische Dataflow	Healthdata
Provide Dummy Dataset	BELRAI
KSZ	
Data Selectie	Faith.be
Goedkeuring KSZ Steerco	KSZ
Technische Dataflow	Healthdata
Provide Dummy Dataset	BELRAI
Bepalen Data Toegang	
Bepalen Inhoud Dashboards	
Goedkeuring Sectoraal Comité	
Draft opstellen	Healthdata
Review	Faith.be, IAC, IMA, KSZ
Indienen	Faith.be
Beraadslaging	SC
Goedkeuring Uniek Dossier e-Health	
Draft opstellen	Healthdata
Review	Faith.be, IAC, IMA, KSZ
Indienen	Healthdata
In Acceptatiestelling	e-Health
In Productiestelling	e-Health
Data Consolidatie	
Inladen Data Definities	Healthdata
Development/Testing	Healthdata, IMA, BELRAI, KSZ
In productiestelling	Healthdata, IMA, BELRAI, KSZ
Reporting	

Project Specific Data Consolidation
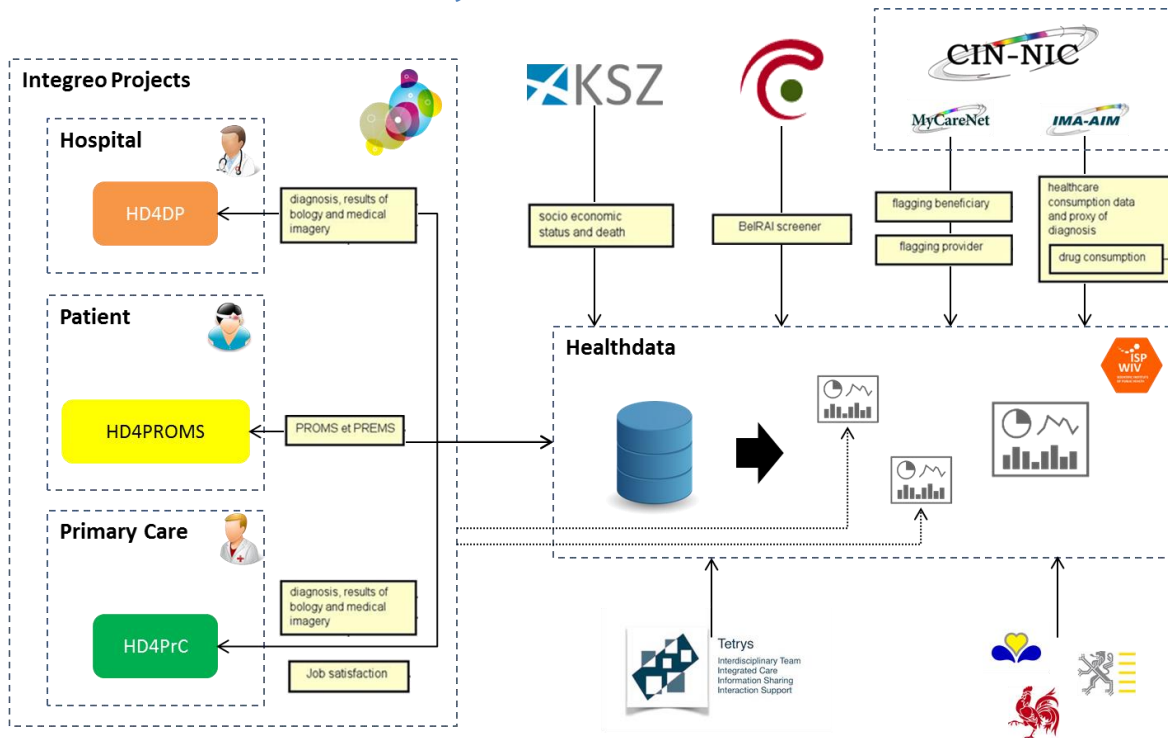
Healthdata Architecture

Healthdata offers care providers and patients with tools to collect data. As depicted below, there are different applications depending on the type of data provider.

The data provided by either the patients themselves (HD4PROMS), Primary Care (HD4PrC) or Hospitals (HD4DP) is sent to the Healthdata Data Warehouse through an acknowledged and secure process (eHealthBox codage), in which the patient's identity gets pseudonymized (coded). Access to the healthdata Data Warehouse is given to FAITH.be-researchers to analyze the pseudonymised data using SAS or R. Private and Public reporting can also be defined by using the Healthstat website.
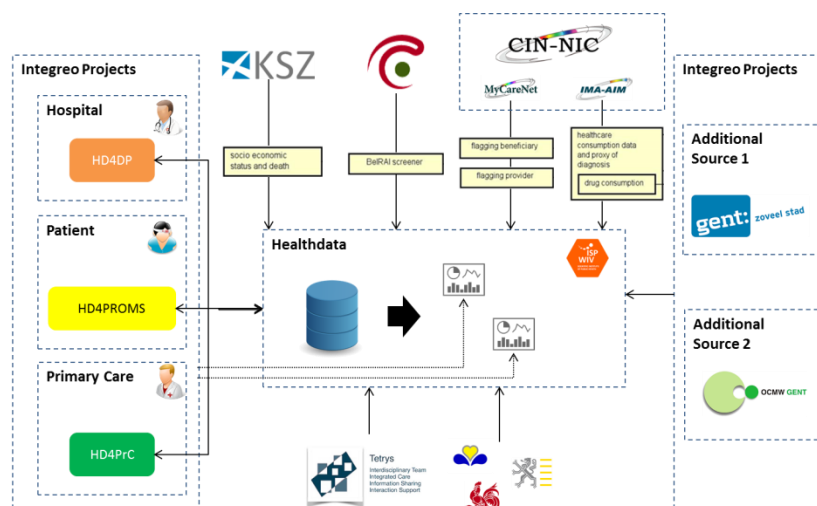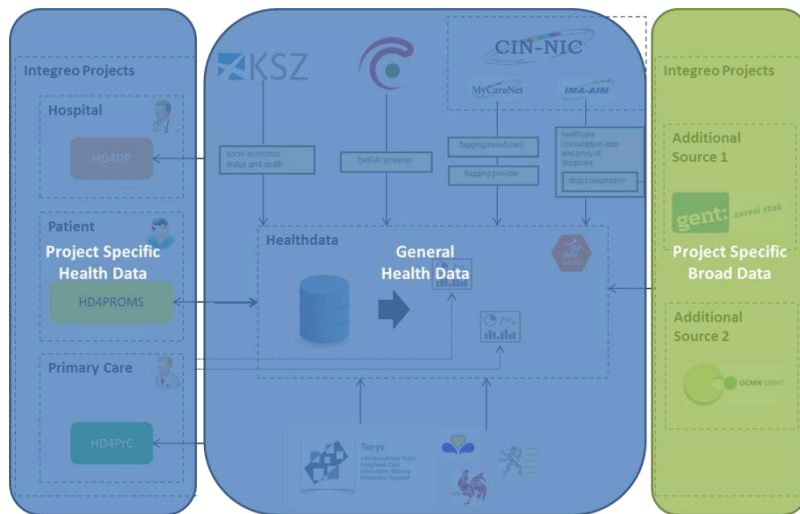
Available Sources for all Projects

As explained in the Global Data Consolidation paragraph, we also want to give project teams the possibility to use the data (partially/regionally) that was gathered for the external evaluation in their self-evaluation dashboards. This means they can link general health data available to their project specific data. The projects are free to determine which data they want to incorporate and what not. We only guide them technically and offer them the possibility to make use of the available sources.
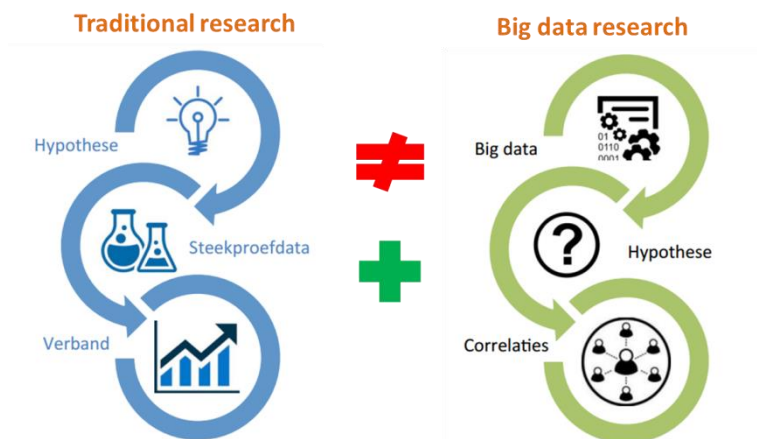
Big Data Vision

A part from the self-gathered data and the global data, we also want to give projects a chance to bring on some sources per project that seem useful for them to add to the existing dataset. These sources can be existing data sources like the local OCMW dataset or regional open data initiatives (for example data.stad.gent) or new data gathering like twitter behavior. All these proposals need to be checked with Healthdata on their feasibility.

This allows each project to expand the dataset we discussed so far not only with project specific or global health data, but also with project specific 'broad' data.

Maybe adding environmental or behavioral data to the more traditionally gathered datasets could provide the researchers with new insights. This kind of additional data allows the projects to evolve from traditional research in which a hypothesis is constructed and specific parameters are gathered to check this, to a new kind of data driven research.

Example of Work Breakdown Structure

FASE 2: Project Specifieke Data Consolidatie	
Afstemmen Tetrys Integratie	Healthdata
Finale Selectie Kandidaten	Faith.be
Data Collectie Definitie	
Introductie HD aan Project Teams	Healthdata
Begeleiding selectie project specifieke parameters	Faith.be
Begeleiding opstellen Data Collectie Definitie	Healthdata
Finalisatie Data Collectie Definitie	Healthdata
Finalisatie Data Flow	Healthdata
Bepalen Data Toegang	
Toegang HD Datawarehouse	Project Team
Toegang Projectspecifieke Dashboards	Project Team
Bepalen Inhoud Dashboards	
Faith Dashboard	Faith.be
Projectspecifieke Dashboards	Project Team
Goedkeuring Annex Sectoraal Comité	
Draft opstellen	Healthdata
Review	Project Team
Indienen	Healthdata
Beraadslaging	SC
Data Consolidatie	
Development/Testing	Healthdata
Go-Live Data Collectie	Healthdata
Data Validatie	Healthdata
Reporting	Healthdata